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United States  
Department of  
Agriculture

Office of  
International Cooperation  
and Development

Technical  
Assistance  
Division

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# USDA International Technical Assistance Activities, 1985

SFP 8 '85

USDA  
PARTY







## Foreword

This report on USDA's international technical assistance demonstrates the scope and variety of development assistance we provide. In view of current public concern regarding the value of U.S. foreign assistance programs, especially the effects of technical assistance on American agriculture, it may be worth noting some of the reasons for our ongoing involvement overseas.

There is a direct relationship between USDA's responsibilities to the American agricultural community and its participation in international technical assistance. USDA's international programs help maintain the lead position of the United States in agricultural research and technology, as well as demonstrate this country's long-term commitment to addressing world food problems.

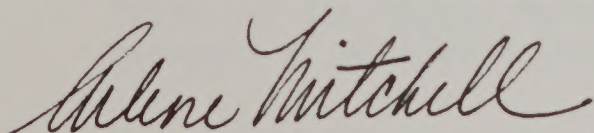
The participation of USDA and USDA-sponsored specialists in development assistance has resulted in research and technology exchange of direct benefit to American agriculture. In addition, developing countries that have been major recipients of U.S. food and economic assistance have increased their purchases of U.S. commodities by 2.8 times in 20 years, and the purchases continue to grow. Developing countries now buy 42 percent of U.S. farm exports and include our most rapidly growing markets abroad.

Agriculture is the main area for development in most of the low-income countries; a high share of their populations earn their living from agriculture. With the pressures of rapidly growing populations, shifting socioeconomic patterns, and adverse weather conditions, increased productivity is needed to meet basic food needs. The USDA is the primary source of American agricultural expertise, especially in certain fields (ranging from agricultural research to extension techniques). And the USDA's involvement provides continuity and long-term commitment to international relationships and programs.

Finally, USDA enlists a unique mix of Federal, private, and university talent to carry out its international programs. Working together with our U.S. collaborators allows us to represent the best the United States has to offer and to contribute to agricultural development worldwide.

We'd like to take this opportunity to thank the many dedicated persons who continue to make our programs successful. We commend the fine work done by the agricultural specialists who work with us overseas and our U.S.-based support personnel.

Your comments on our programs and this report are welcome.

A handwritten signature in cursive script, reading "Arlene Mitchell". The signature is fluid and elegant, with a large initial 'A' and 'M'.

Arlene Mitchell  
Deputy Assistant Administrator and  
Director, Technical Assistance Division





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April 1986





## Acronyms and Abbreviations Used in this Publication

AID	Agency for International Development
APHIS	Animal and Plant Health Inspection Service
ARS	Agricultural Research Service
ASCS	Agricultural Stabilization and Conservation Service
ASEAN	Association of South East Asia Nations
CDSS	Country Development Strategy Statement
EMS	Economics Management Staff
ERS	Economic Research Service
ES	Extension Service
FAO	Food and Agriculture Organization of the United Nations
FAS	Foreign Agricultural Service
FCIC	Federal Crop Insurance Corporation
FS	Forest Service
FSIS	Food Safety and Inspection Service
IAEA	International Atomic Energy Agency
IBRD	World Bank--International Bank for Reconstruction & Development
NAL	National Agricultural Library
OFDA	Office of Foreign Disaster Assistance (AID)
OICD	Office of International Cooperation and Development
OIRM	Office of Information Resources Management
OPEC	Organization of Petroleum Exporting Countries
PASA	Participating Agency Services Agreement
PID	Project Identification Document
REDSO	Regional Economic Development Services Office (AID)
RSSA	Resources Support Services Agreement
S&T	Bureau for Science and Technology, AID
S&T/AGR	Office of Agriculture, Bureau for Science and Technology, AID
S&T/FENR	Office of Forestry, Environment, and Natural Resources, Bureau for Science and Technology, AID
S&T/N	Office of Nutrition, Bureau for Science and Technology, AID
SCS	Soil Conservation Service
SRS	Statistical Reporting Service
TAD	Technical Assistance Division
TDY	Temporary Duty Assignment
USAID	U.S. Agency for International Development





## USDA INTERNATIONAL TECHNICAL ASSISTANCE ACTIVITIES, 1985

The Technical Assistance Division (TAD) of the Office of International Cooperation and Development (OICD) plans, administers, and coordinates USDA's technical assistance programs overseas in cooperation with the Agency for International Development (AID). TAD draws upon the resources of USDA agencies, U.S. universities, and the private sector. The cooperating USDA agencies are listed on the inside cover. Assistance is provided in response to requests from AID, foreign governments, and international agricultural organizations.

This annual report highlights some of the success stories of ongoing and recently completed technical assistance programs. Not only do these activities help developing countries improve the quality of rural life and speed economic development, they help to raise income levels, expand commercial markets for the products of U.S. farms and forests, and ensure the security of future world food supplies.

Hunger and malnutrition remain a fact of life for an estimated 500 million persons, but there have been dramatic improvements in agricultural production in many countries. There is little doubt that these improvements are the direct result of the application of modern agricultural technology. New and troubling problems are emerging, such as soil erosion, pesticide resistance, and rapid increases in energy costs which combine to threaten recent gains. OICD's mandate is to reduce hunger and malnutrition in low- and middle-income countries through the transfer of agricultural technology and by sharing cost-effective methods of managing public agricultural support services.

The ultimate objective is to help the people of developing countries to help themselves. A particular advantage of the USDA role is that its employees are able to work in a collaborative manner with their professional counterparts to address problems of interest to each country. Almost two-thirds of the person-months of assistance are provided by USDA employees. The remainder is provided by personnel from U.S. universities and the private sector.

While OICD-managed assistance programs cover a wide range of disciplines and subject areas, they reflect the types of programs carried out by USDA services and agencies. They include animal and plant disease control and suppression, soil and water technology, livestock and crop production, management of public forests and rangelands, agricultural data, information and marketing services, economic analysis and forecasting services, and agricultural reference services.

## FISCAL 1985 TECHNICAL ASSISTANCE ACTIVITIES

The need for technical assistance continues to be strong even though there was a slight decrease from the 1984 level in technical assistance provided. Although the number of technician assignments decreased 15 percent, the months of technical assistance provided decreased less than one-half of 1 percent. During FY 1985 OICD worked with AID, international organizations, selected developing nations, and the Organization of Petroleum Exporting Countries (OPEC).

Technical assistance personnel from universities, the private sector, and 15 USDA agencies traveled to 87 countries to perform work requested under various agreements, conduct workshops, and participate in seminars and planning sessions. Programs included animal health, agricultural crop estimation, soil and water management, crop production and marketing systems, forestry, food technology, rural development, and resource conservation. There were 506 short-term temporary duty assignments (TDY's) and 244 long-term assignments, of which 124 were overseas. USDA scientists and technicians provided 64 percent of this direct assistance; the remaining 36 percent was provided by U.S. universities and private sources, under the direction of OICD.

## EXAMPLES OF RECENT PROGRESS

Burundi--Basic Food Crops. In 1984, USDA was invited to participate in an ongoing project in Burundi designed to provide high-quality seed to increase the yields for certain basic staple foods. USDA provided a resident farm manager within that year and in 1985 an agronomist also took up residency. Farm management has taken a dramatic turn for the better and USDA has been lauded in several evaluations of the project. OICD has also provided consultants in records management and will be providing seed processing expertise in 1986.

Disaster Assistance Support. OICD's Technical Assistance Division has recently entered into an agreement with the Office of Foreign Disaster Assistance of the Agency for International Development (OFDA/AID) to initiate and backstop a disaster assistance program in fields in which USDA has preeminent expertise (wildfire suppression, flood control, etc.) The program, to be technically implemented by the USDA Forest Service in cooperation with OICD, will support activities in high disaster-risk countries. The services provided under this agreement are primarily:

- ° Technical assistance to OFDA, AID Missions, and interested countries,
- ° Support for OFDA and country-initiated training programs and workshops, and



- ° Formation and maintenance of a roster of technical expertise in disaster relief specialties.

Thus far, OICD and the Forest Service have collaborated on conducting an international wildfire suppression course in Chile and a country-specific wildfire suppression training program in Venezuela.

Ecuador--Forest Management. In 1984 the USDA Forest Service and the U.S. Agency for International Development Mission (USAID) began a major effort to assist the Government of Ecuador in carrying out silviculture research with an eye to improving management of forest areas within the critical watersheds of the country. This work is to be completed in 1988.

The Gambia--Soil and Water Management. USDA has worked with USAID over the last 6 years to develop and establish soil and water management capabilities within the Gambian Department of Agriculture. A soil and water management unit, initially staffed by three resident technicians from USDA's Soil Conservation Service (SCS), has developed operating procedures, selected employees for U.S. university enrollment, locally trained a wide spectrum of agricultural generalists to provide extension services to Gambian farmers, and developed technical guides on the proper use and management of different soils for conservation and sustained production of food. The unit has now become established within the Department of Agriculture under full Gambian leadership and staffing. Local participating farmers have welcomed the results so far--restored water supply, reclaimed hectares, and increased yields. USDA/SCS technical assistance under the project is scheduled to continue through June 1987.

Guatemala--Small Farm Crop Diversification. A major project was started in Guatemala in 1984 and currently involves four resident USDA employees. The work is located in the northeastern highlands of Guatemala which have a temperate climate. The thrust of this USAID project is to introduce deciduous fruits and vegetables to Indian farmers who have extremely small acreage. Historically, the Indian farmers have only grown beans and corn to meet the food needs of their own families. The introduction of fruits and vegetables into their farming pattern will give the farmers cash incomes as well as improve the dietary intake of their families through the addition of leafy green and yellow vegetables.

Indonesia--Food Fortification with Vitamin A. OICD has developed a new process for fortifying monosodium glutamate (MSG), a widely used flavor enhancer, with vitamin A to help reduce vitamin A deficiency diseases in developing countries. Severe vitamin A deficiency results in blindness among 250,000 young children in Indonesia annually and recent findings indicate that even moderate deficiency causes a significant increase in

morbidity and mortality rates. During 1985, OICD technology and equipment were used to manufacture vitamin A fortified MSG which was distributed in rural areas of Indonesia near Jakarta. Preliminary evaluations have confirmed that fortified MSG is acceptable to consumers and indicate positive nutritional impact--ocular signs of vitamin A deficiency have been reduced, blood serum levels of vitamin A have increased, and vitamin A content of breast milk has been raised substantially. OICD is continuing to assist the Government of Indonesia in its program and expects to provide technical assistance to the Governments of the Philippines, Malawi, and others interested in overcoming vitamin A deficiency through food fortification.

Jordan--Biological Control Program. OICD organized and mobilized appropriate USDA expertise to design and implement a biological control program for the spherical mealybug that infests the citrus groves of the Jordan River Valley. Entomologists from USDA's Agricultural Research Service (ARS) assessed the problem in Jordan and made recommendations for control. USDA experts have trained employees of the Jordanian Ministry of Agriculture in various aspects of biological control and are undertaking a series of exploration trips throughout the world to identify and collect natural enemies of the spherical mealybug and import them to Jordan for release. Benefits to American agriculture are expected as a result of the knowledge gained by American scientists in identifying natural enemies of the mealybug in other parts of the world and evaluating and documenting their relative impact on infestations.

Morocco--Statistics for Agriculture. USDA is coordinating a project designed to establish a crop estimating system for Morocco and to build statistics and economics capabilities within the Moroccan Ministry of Agriculture and Agrarian Reform. It will include components involving the interpretation of aerial photographs, the construction and implementation of an area sample frame, crop yields modeling, statistical reporting and interpretation, and economic analysis. Moroccans trained in these areas can significantly enhance their country's policy decisions. USDA resident personnel now include two agricultural statisticians and an economist. A trained cadre of Moroccans will be able to continue the work once the USDA staff has left the country. Significant quantities of computer equipment are being purchased from the U.S. private sector.

Pakistan--Agricultural Data Collection and Analysis. This activity is a component of the Agency for International Development (AID) project on food security management. Under the project, the Statistical Reporting Service (SRS) of USDA has assigned a team of two statisticians to begin implementation of an area frame sampling system to enhance the collection of agricultural data. Additionally, the project will result in enhanced data analysis and interpretation at local, provincial, and national levels. The project is expected to have a duration of 4 years.



Peru--Soil Conservation. The USDA's Soil Conservation Service is working with AID to provide long-term technical assistance to the Government of Peru to create a soil conservation service system throughout the country. Technical assistance focuses on the introduction of improved soil conservation practices and on the training of technicians and farmers in the field. The project has been rated a major success in Peru's agricultural development efforts.

Soil and Water Management (Worldwide). Water is one of the limiting natural resources over vast areas of agricultural land in the developing world. With increasing costs and related problems of irrigation systems, developing countries are turning more and more toward the improvement of productivity and stability of dryland or rainfed farming systems. USDA is assisting the U.S. Agency for International Development (AID) in programs aimed at devising and spreading appropriate technologies for effectively conserving and utilizing the available soil moisture in the dryland farming regions of developing countries. Assistance is provided to developing countries in soil surveys, classification, and in the use and management of soils. OICD is cooperating with USDA's Agricultural Research Service (ARS), Soil Conservation Service (SCS), and Economic Research Service (ERS) to establish research linkages between scientists in the United States and in the developing countries.

During FY 1985 a tour of the Western Great Plains from North Dakota to Texas was conducted for 26 agricultural officials, research administrators, and research scientists from Africa, the Near East, and India. Discussions were begun for collaborative research projects involving scientists from host countries, international agricultural research centers, and the United States. International training included soil taxonomy forums in Rwanda, Burundi, Zambia, and Tunisia; soil classification workshops in India and Brazil; and a land clearing workshop in Indonesia.

Somalia Agricultural Sector. Since the late 1970's, USDA has cooperated with USAID in improving Somalia's agricultural sector. The Department has provided resident assistance in agronomy and animal extension, forestry management in refugee areas, and improved poultry production. Currently a resident USDA economist is advising the government in agricultural policy and planning, and USDA's Animal and Plant Health Inspection Service (APHIS) is providing a resident team of experts to establish quarantine stations for Somalia's all-important livestock sector. The Department's services include incountry agricultural seminars, university enrollment, and U.S. study tours.

GLOBAL CHANGES, FY 1981 VERSUS FY 1985

Number of Technician Assignments--By Area

<u>Area</u>	<u>FY 1981</u>	<u>FY 1985</u>	<u>Percentage of Change</u>
Africa	200	172	-14
Asia	51	56	10
Latin America	169	177	5
Middle East	66	86	30
Worldwide	<u>360</u>	<u>259</u>	-28
Total	846	750	-11

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Person-Months of Technical Assistance Provided--By Area

<u>Area</u>	<u>FY 1981</u>	<u>FY 1985</u>	<u>Percentage of Change</u>
Africa	871.9	805.7	-8
Asia	84.1	141.6	68
Latin America	317.1	408.4	29
Middle East	377.4	424.5	12
Worldwide	<u>1,146.7</u>	<u>1,025.3</u>	-11
Total	2,797.2	2,805.5	No Significant Change



OICD TECHNICAL ASSISTANCE AGREEMENTS, BY AREA, 1980-85

<u>Area</u>	<u>FY 80</u>	<u>FY 81</u>	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>	<u>FY 85</u>
Africa	39	41	40	40	40	35
Asia	13	19	22	21	23	23
Latin America	32	32	35	47	50	50
Middle East	16	12	14	16	16	10
Worldwide	25	30	29	33	46	39
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TOTAL	125	134	140	157	175	157

OICD TECHNICAL ASSISTANCE ASSIGNMENTS, BY AREA, 1980-85

<u>Area</u>	<u>FY 80</u>	<u>FY 81</u>	<u>FY 82</u>	<u>FY 83</u>	<u>FY 84</u>	<u>FY 85</u>
Africa	188	200	182	204	214	172
Asia	30	51	74	126	89	56
Latin America	127	169	190	192	170	177
Middle East	75	66	99	111	80	86
Worldwide	355	360	287	341	334	259
	<hr/>					
TOTAL	775	846	832	974	887	750
	<hr/>					
Long-term assignments	215	226	209	248	271	244
Short-term assignments	560	620	623	726	616	506
	<hr/>					
TOTAL	775	846	832	974	887	750

TECHNICAL ASSISTANCE PERSONNEL BY PARTICIPATING USDA AND NON-USDA AGENCIES, FISCAL 1985

Number of Technician Assignments

<u>Agency</u>	<u>Africa</u>	<u>Asia</u>	<u>Latin America</u>	<u>Middle East</u>	<u>World-wide</u>	<u>Total</u>
APHIS	11	-	7	2	1	21
ARS	-	3	7	-	37	47
ASCS	-	-	-	-	1	1
EMS	-	-	-	-	1	1
ERS	8	-	3	12	22	45
ES	20	4	14	1	3	42
FAS	1	-	-	-	-	1
FCIC	-	1	1	-	-	2
FS	2	2	15	-	20	39
FSIS	-	-	3	-	-	3
NAL	-	-	-	-	1	1
OICD	23	2	24	12	31	92
OIRM	-	-	-	1	-	1
SCS	4	8	17	11	19	59
SRS	8	5	22	16	1	52
Universities	37	3	21	19	74	154
Other Non-USDA <u>1/</u>	<u>58</u>	<u>28</u>	<u>43</u>	<u>12</u>	<u>48</u>	<u>189</u>
TOTAL	172	56	177	86	259	750

Person-Months of Technical Assistance Provided

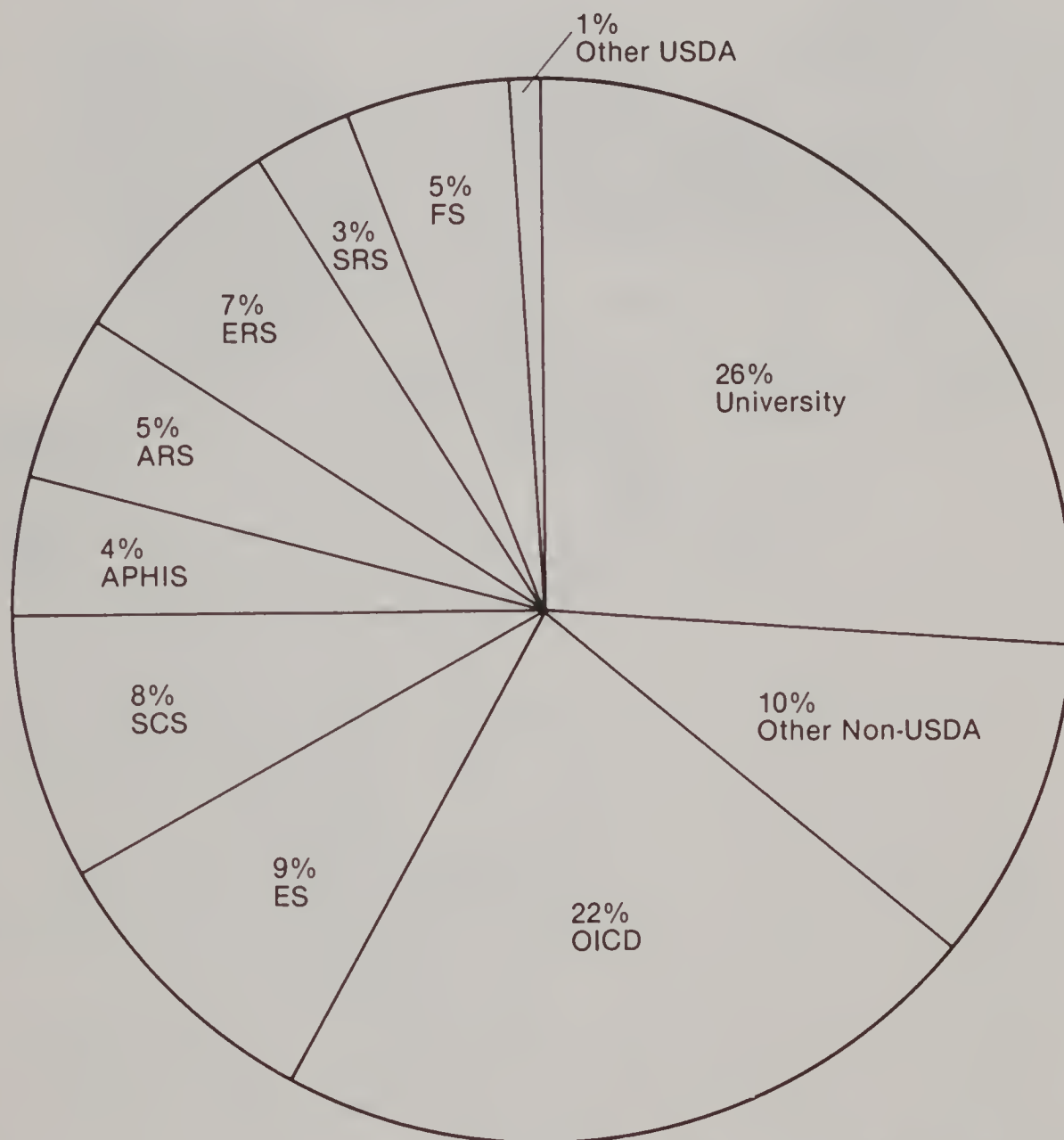
APHIS	80.6	-	17.3	2.0	12.0	111.9
ARS	-	2.5	2.7	-	144.8	150.0
ASCS	-	-	-	-	.5	.5
EMS	-	-	-	-	2.3	2.3
ERS	27.7	-	1.4	17.2	151.8	198.1
ES	90.9	19.9	105.6	10.2	12.8	239.4
FAS	1.0	-	-	-	-	1.0
FCIC	-	1.1	3.0	-	-	4.1
FS	8.6	1.8	46.5	-	104.0	160.9
FSIS	-	-	1.8	-	-	1.8
NAL	-	-	-	-	15.2	15.2
OICD	146.6	15.2	73.3	130.2	239.8	605.1
OIRM	-	-	-	9.1	-	9.1
SCS	15.8	45.5	42.6	66.9	46.8	217.6
SRS	45.8	3.2	20.7	10.8	.6	81.1
Universities	256.1	15.6	57.7	166.3	221.6	717.3
Other Non-USDA <u>1/</u>	<u>132.6</u>	<u>36.8</u>	<u>35.8</u>	<u>11.8</u>	<u>73.1</u>	<u>290.1</u>
TOTAL	805.7	141.6	408.4	424.5	1,025.3	2,805.5

1/ Includes other U.S. Government agencies, international organizations, and contract personnel.

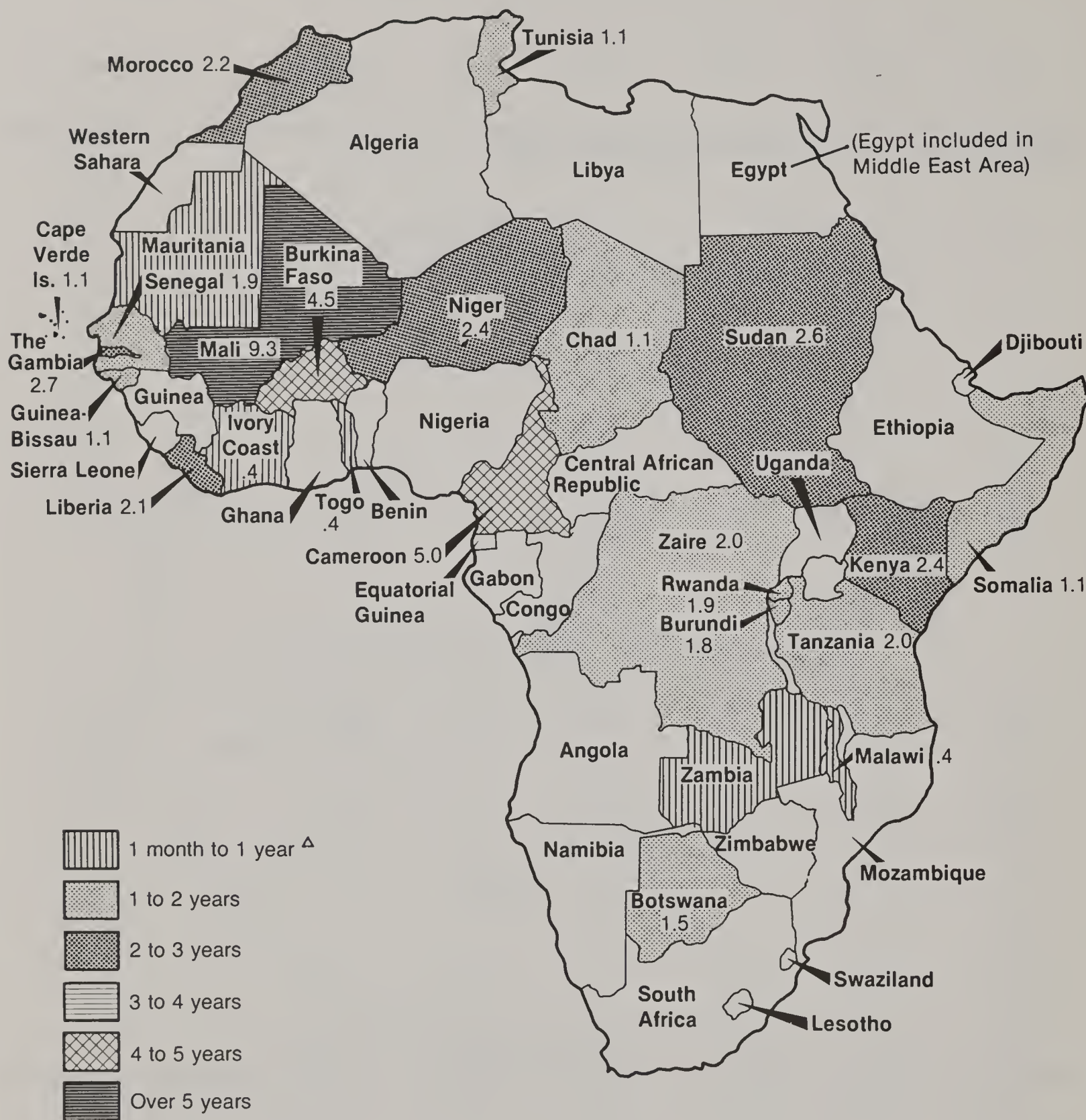


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## Staff-Months of U.S. Technical Assistance, 1985



# **\*Staff-Years of Technical Assistance Provided During Fiscal Year 1985 - Africa Area**



\* Includes assignments and TDY's performed by OICD's Worldwide Program Area.

$\Delta$  Countries in which OICD worked less than 1 month are not indicated on the map. These include Algeria, Ghana, Lesotho, Mozambique, Nigeria and Zimbabwe. Time is not shown for countries receiving less than 3 months of technical assistance.

Boundary representation is not necessarily authoritative.



AFRICA: USDA TECHNICAL ASSISTANCE PERSONNEL, BY COUNTRY AND PROJECT, FISCAL 1985

<u>Country</u>	<u>Project Title</u>	<u>No. of Technician Assignments</u>			<u>1/</u>
		<u>Long-Term</u>	<u>Short-Term</u>	<u>Total</u>	
Algeria	Irrigated Agriculture, Trade & Development	-	1	1	
Botswana	Agricultural Planning	2	-	2	
Burkina Faso	Forestry Education and Development	4	1	5	
"	Semiarid Food Grain Research and Development	1	1	2	
Burundi	Basic Food Crops	2	4	6	
"	Forestry	1	1	2	
Cameroon	Agricultural Management and Planning	4	4	8	
"	Agricultural Officer	1	-	1	
"	Research/Extension Specialist	1	-	1	
Cape Verde	Watershed Management	2	-	2	
Gambia	Agricultural Research & Diversification PID	-	1	1	
"	Soil and Water Management	1	3	4	
Guinea Bissau	Food Crop Protection	1	2	3	
Kenya	Agricultural Economist (REDSO)	1	4	5	
"	Dryland Cropping Systems Research	1	-	1	
Liberia	Sector Analysis Planning	2	1	3	
Mali	Livestock	7	2	9	
"	Regional Livestock Advisor	1	-	1	
Morocco	Statistics	2	6	8	
Rwanda	Agricultural Survey and Analysis	1	-	1	
"	Deputy Agricultural Officer	1	-	1	
Somalia	Agricultural Program Support	1	-	1	
"	Forestry	1	-	1	
"	Livestock Health Inspection	-	6	6	
Sudan	Agricultural Planning and Statistics	2	9	11	
Tanzania	Rural Development Training	2	-	2	
Togo	Manpower Development	-	2	2	
Tunisia	Small Farmer Supervised Credit	1	1	2	
Zaire	Development Manpower Training	-	22	22	
Multicountry	Sahel Regional Financial Management	13	16	29	
"	Sahel Regional Food Crop Protection	1	3	4	
U.S.-Based	Africa Development Resources	10	1	11	
"	Africa Food Grain Research	1	-	1	
"	Africa Technical Services	3	3	6	
"	Strengthening African Agr'l Research (SAAR)	4	3	7	
TOTAL		75	97	172	<u>2/</u>

1/ Individual technicians may have performed more than one assignment.

2/ In addition, U.S.-based personnel performed 25 international TDY's to 18 countries: Burkina Faso, Canada, Chad, France, The Gambia, Italy, Ivory Coast, Kenya, Lesotho, Malawi, Mali, Mauritania, Niger, Nigeria, Rwanda, Senegal, Somalia, and Zimbabwe.

SYNOPSIS OF AFRICAN TECHNICAL ASSISTANCE PROJECTS  
IN PROGRESS DURING FISCAL 1985

Algeria--Irrigated Agriculture, Trade, and Development  
Int'l Development Cooperation Agency      July - August 1985

OICD provided one member of the U.S. soil scientist team which examined suggested sites for technical assistance projects in the desert region of Algeria. This activity was in response to requests made during the USDA negotiating mission to Algiers in May 1985.

Botswana--Agricultural Planning  
IBW-0067-P-AG-2258      October 1978 - October 1984

An OICD resident technician in livestock economics served in the Ministry of Agriculture's Planning and Statistical Unit. He advised the Government on rural development needs, while training Botswanan officials to assume their responsibilities in this area. The surveys and analyses prepared under the project are enabling the Government of Botswana to improve agricultural sector productivity and total agricultural production.

A followup to the Agricultural Planning Project through October 1987 is being carried out under a Cooperative Agreement between USDA/OICD and the Academy for Educational Development.

Burkina Faso--Forestry Education and Development  
IHV-0235-P-AG-2165      January 1981 - June 1985

Six USDA technicians worked in the classified forest at Dinderesso, near Bobo-Dioulasso, on a variety of short-term assignments. Three served as instructors at the school for forestry agents, two as forest managers, and one as team leader. The project's purpose was to improve and expand the Dinderesso Training Center for lower level forestry agents and develop and execute a management plan for the national forest adjoining the center. As a result, the center was able to provide a model for forest management of national forests throughout the Sahel.

Burkina Faso--Semiarid Food Grain Research and Development (SAFGRAD)  
IV0-0393-P-AG-2017      August 1981 - September 1986

A USDA resident technician serves as development specialist under this project. He coordinates and plans activities for the various participating groups and provides technical backstopping as needed.



Burundi--Basic Food Crops  
IBI-0101-P-AG-4242

July 1984 - December 1986

Two resident USDA technicians are serving as advisors in farm management and agronomy on a seed multiplication farm along with several agronomists, seed experts, and harvest experts on short-term assignments. The objective of this farm, the first mechanized seed production site in a country where mechanized farming is generally not known, is to produce high-quality seed to distribute to farmers to enhance yields of the basic food crops.

Burundi--Forestry  
IBI-0105-P-AG-3016

December 1982 - April 1987

A resident specialist is helping the National Institute of Conservation of Natural Resources and the Department of Water and Forestry establish a tropical highland nursery. The nursery should produce a wide variety of species of seedlings for multiple use (erosion control, fuelwood, charcoal, timber, etc.) to enhance the forestry sector in Burundi. The specialist advises on:

- ° Nursery layout,
- ° Selection of species,
- ° Planting techniques,
- ° Postplanting care and maintenance,
- ° Access road layout and construction, and
- ° Planting trails and educational activities.

Cameroon--Agricultural Management and Planning  
ICM-0008-P-AG-2167

September 1979 - June 1987

Four resident specialists and supporting consultants are developing an agricultural economics and planning unit within the Ministry of Agriculture. The unit should be capable of planning, designing, and carrying out agricultural development projects in the Ministry's Directorate of Studies and Projects and the Statistical Unit. Project strategy is to use a multidonor collaborative approach to technical assistance. The project should develop local expertise in agricultural sector analysis and in planning, designing, carrying out, monitoring, and evaluating projects for the rural sector.

Cameroon--Agricultural Officer  
ICM-0000-P-AG-2019

March 1982 - January 1986

A USDA/OICD technician is serving as the agricultural officer at the Agency for International Development (AID) mission in Yaounde, Cameroon. In this position, he has overall responsibility for coordinating the AID agricultural program in Cameroon. He also is the principal agricultural advisor to the AID mission director.

Cameroon--Research/Extension Specialist

ICM-0052-P-AG-5074

July 1985 - July 1987

USDA/ES is providing the long-term services of an agricultural research/extension officer to serve in the Agriculture and Rural Development Division of USAID/Cameroon. He has overall responsibility for designing, managing, monitoring, and coordinating agricultural research and extension projects.

Cape Verde--Watershed Management

ICV-0006-P-AG-3171

March 1981 - April 1985

A USDA agricultural extension specialist and a soil conservationist served as resident technicians working with Cape Verde counterparts and technical teams to develop an appropriate technology infrastructure to preserve and manage a watershed area in Cape Verde. Responsibilities included developing a training plan and information system for the Watershed Management Pilot Extension Program and organizing, setting up, and putting into operation the physical soils laboratory at the Agrarian Studies Center. The project is expected to serve as a model for other nearby islands and countries in the Sahel.

Gambia--Agricultural Research and Diversification

IGM-0929-P-AG-4237

October - November 1984

USDA/ES provided the services of an agricultural research and extension training specialist to prepare a Project Identification Document (PID), which provided an analysis of the human resources and organizational requirements within the Ministries of Agriculture and Water Resources and other institutions working in agriculture or related activities. Duties included recommending training, reassignments, and/or reorganizations, if necessary, and suggesting how to proceed.

Gambia--Soil and Water Management

IGA-0202-P-AG-2195

July 1978 - September 1986

In the beginning of this project a resident conservation and management specialist helped establish a soil and water management unit in the Gambian Department of Agriculture. Another resident conservationist is now on duty to emphasize applied technology and extension methodology until the project is completed in 1986. He is being assisted by various short-term technicians.

Guinea-Bissau--Food Crop Protection

IGW-0007-P-AG-5012

October 1984 - March 1986

USDA is providing both long- and short-term technical assistance to strengthen Guinea-Bissau's plant protection service in its efforts to demonstrate, train, and assist local farmers in integrated pest



management practices. Responsibilities include studying plant diseases that can adversely affect production; surveying village-level storage, commercial warehouses, and port facilities to determine key pests; and advising appropriate action.

Kenya--Agricultural Economist  
IKE-5102-P-AG-4204

December 1983 - September 1987

An OICD technician is assigned as a resident agricultural economist in the AID Regional Economic Development Services Office (REDSO) in Nairobi, Kenya. He is providing technical support to AID missions throughout the region by preparing the supporting economic analysis for all projects and other AID documentation; preparing specific policy papers on subjects related to the development of the agriculture sector; and initiating and supporting research which has direct programmatic value for ongoing or proposed assistance activities in the rural development area. He is being assisted by various short-term technicians.

Kenya--Dryland Cropping Systems Research  
IKE-0000-P-AG-2260

November 1979 - December 1985

USDA resident technicians have been working with the Kenyan Agricultural Research Institute (KARI) to develop research and extension packages to demonstrate the most productive use of marginal lands. Field trials are being conducted through farmer cooperators. A maize geneticist is now the only USDA resident staff member on this project.

Liberia--Sector Analysis Planning  
ILR-0137-P-AG-2208

October 1977 - September 1986

USDA is providing both long- and short-term assistance to the Liberian Ministry of Agriculture's Planning Division in the analysis and interpretation of household food demand and consumption data and associated issues of food policy. This analysis will contribute toward the establishment of a factual data base for continuing examination of the agricultural sector and the preparation of a comprehensive Liberian sector analysis report.

Mali--Livestock  
IML-0218-P-AG-3066

October 1982 - September 1987

USDA, AID, and the Government of Mali are cooperating on a major project to improve production in the country's critical livestock sector. Vaccine production, already developed under the Central Veterinary Laboratory project, will continue with new emphasis on diagnostics, vaccine delivery, counterpart training, and project management. Seven USDA resident technicians are participating. Numerous short-term assignments are planned during project implementation.

Mali--Regional Livestock Advisor  
IML-0000-P-AG-2210

October 1979 - January 1985

A livestock advisor from the USDA Extension Service (ES) served on resident assignment helping the Sahel Development Regional Officer (SDRO) to coordinate and provide technical input on livestock for long-range planning of the U.S.-Sahel Development Program. The advisor served as AID's technical liaison with the Club du Sahel on matters pertaining to livestock production, marketing, and health and contributed expert advice to the formulation of AID strategy for assistance in the Sahel.

Morocco--Statistics  
IMA-0182-P-AG-4217

July 1984 - September 1993

USDA technicians, long- and short-term, are assisting in the development of a broad statistics capability within the Ministry of Agriculture. Components include aerial photography, area frame sampling, and crop yield modeling. The Statistical Reporting Service (SRS) is taking a lead role, and the U.S. private sector will provide much of the basic technical advice.

Rwanda--Agricultural Survey and Analysis  
IRW-0115-P-AG-3096

May 1983 - July 1985

USDA/ES provided the services of an agricultural economist for a 2-year period to help the Ministry of Agriculture and Livestock strengthen its capability in data collection and processing, economic analyses, planning, and management. Institution building, training, and documentation were areas stressed in this project.

Rwanda--Deputy Agricultural Officer  
IRW-0000-P-AG-3180

October 1983 - June 1986

USDA/ES is providing the long-term services of an agricultural policy analyst to serve as a deputy to the principal AID agricultural officer in Rwanda. The technician is responsible for major agricultural projects under the AID program, including assisting the mission in analyzing the host government's agricultural policies and assessing how these policies are being implemented.

Somalia--Agricultural Program Support  
ISO-0000-P-AG-5075

August 1985 - August 1990

USDA/OICD is providing the services of a resident agricultural economist to assist USAID/Somalia in the analysis and evaluation of all aspects of the economy on which agricultural production and consumption has a direct impact. This includes analysis and evaluation of agricultural production; food consumption and distribution; transportation,

marketing, and storage methods; land reform and land usage, farm tenure, and land management practices; marketing, cooperatives, credit practices and institutions; industrialization and the promotion of agricultural industries as they affect rural and urban development; and government laws and practices which relate to the whole field of agriculture. Because of the program's broad base, additional short-term assistance will be provided as required.

Somalia--Forestry  
ISO-0122-P-AG-3087

March 1983 - August 1986

USDA/ES provided the long-term services of a forestry technician to act as the Forestry Department's Technical Program Advisor in the National Range Agency. The technician monitored implementation, further design, and coordination of Somalia's forestry programs, particularly in refugee areas.

Somalia--Livestock Health Inspection  
ISO-0109-P-AG-5034

January 1985 - June 1988

A major component of the livestock project is the development of a quarantine system for the export of Somali cattle. USDA is providing various short-term services to assist the Ministry of Livestock, Forestry, and Range (MLFR) to establish a livestock quarantine unit under the Department of Animal Health. In addition, facilities will be constructed and operated under the MLFR to hold export cattle in quarantine, and a program of prequarantine inspection and vaccination will be instituted. Long-term assistance in veterinary and feedlot components will be provided at a later date.

Sudan--Agricultural Planning and Statistics  
ISD-0047-P-AG-2037

April 1982 - April 1987

The Sudan Agricultural Planning and Statistics Project is designed to:

- ° Develop a reliable agricultural data base and reporting system;
- ° Strengthen the capability of the Ministry of Agriculture to identify, establish priorities, and analyze critical economic, trade, and marketing issues; and
- ° Develop methodologies for identifying, appraising, and planning agricultural projects.

Resident assistance has been provided by two USDA technicians--an agricultural economist and a statistician. Various types of short-term assistance are also being provided.



Tanzania--Rural Development Training  
ITZ-0161-P-AG-2020

November 1979 - December 1985

This project strengthened the managerial and technical capacities of decentralized rural development institutions to achieve agricultural growth, expand rural services, and enhance self-help activities by individual farmers and village cooperatives. To accomplish this, the project developed a model rural development training system focused on increasing agricultural production and income levels in villages of five high potential regions of Tanzania (Iringa, Mbeya, Ruvuma, Rukwa, and Arusha). USDA provided two resident technicians under this project.

Togo--Manpower Development  
ITG-0433-P-AG-4022

August 1983 - September 1986

USDA provided a training program in small farmer credit to agency heads of Togo's National Agriculture Credit Bank (CNCA). CNCA agency heads, who have ultimate responsibility for loans made in their zones, require expertise in portfolio evaluation and management to permit them to work more closely and with greater understanding with loan officers. This was part of Togo's overall purpose to improve productivity of leadership personnel and to reinforce the ability of the CNCA to deal effectively with agricultural credit in Togo.

Tunisia--Small Farmer Supervised Credit  
ITN-0302-P-AG-4021

July 1978 - March 1986

Resident and short-term advisors continued to assist the Government of Tunisia in carrying out a supervised credit program. The project will improve agricultural production inputs and technical know-how resulting in increased level of production technology used by a significant number of operators of small- and medium-size farms.

Zaire--Development Manpower Training  
IZR-0068-P-AG-3065

September 1982 - December 1987

The purpose of this project is to provide two Government of Zaire institutions--CENACOF and Condition Feminine--with management training enabling them to function more effectively and institutionalize professional training competencies. In fiscal year 1985 the following courses were designed and presented under the project:

- ° Training of Trainers in Management
- ° Grain Storage/Postharvest Loss
- ° Agricultural Policy Seminar
- ° Establishing Data Bases and Analytical Systems for Economic Decisionmaking in Agriculture

- ° Management of Agricultural Research
- ° Management of Organizational Change
- ° Integrated Rural Development

Sahel--Regional Financial Management  
ISE-0950-P-AG-2217

September 1982 - June 1986

OICD and Virginia Polytechnic Institute and State University are collaborating on the Sahel Regional Financial Management Project (SRFMP) by providing resident and short-term technical assistance to improve financial management in six Sahelian countries: Senegal, Mali, Chad, Niger, The Gambia, and Burkina Faso. TDY assistance is being provided to Mauritania in preparation for SRFMP activities in that country. OICD and VPI assistance has improved financial management of Sahelian development institutions and has encouraged institutionalization of improved management practices in both the public and private sectors.

Sahel--Regional Food Crop Protection  
ISE-0928-P-AG-2227

September 1975 - February 1985

This past year saw the completion of the Sahel Regional Food Crop Protection Project, which was designed to improve the capabilities of national crop protection services throughout the region. During the 10 years of project activity, residents in many countries, including Senegal, The Gambia, Cameroon, and Guinea-Bissau, worked with U.S. technical advisors to develop effective methods for protecting crops from insects and disease and increasing food crop production. USDA's Animal and Plant Health Inspection Service served as lead technical agency on this project and continues to support the Guinea-Bissau portion of the activity as a bilateral project.

Africa--Development Resources  
BAF-0135-R-AG-2200

October 1980 - Ongoing

This project is funded through a Resources Support Services Agreement (RSSA) designed to provide a wide variety of assistance to AID in Washington and in the field. The project is staffed by long-term USDA employees, short-term employees on travel status, contractors, and university staff. Assistance has been possible in the technical analyses of country plans under AID's Economic Development Initiatives.

Africa--Food Grain Research  
AFR-0393-P-AG-2096

January 1980 - March 1986

An OICD agricultural economist is assisting the Africa regional affairs staff of AID/Washington and AID missions in Africa with food grain projects and related activities. The economist is giving advice on training, extension, marketing, storage, and intermediate technology.

Africa--Technical Services  
ISE-0929-R-AG-2220

December 1976 - Ongoing

USDA is providing technical services to both the overseas missions and AID/Washington to meet requirements of project and policy formulation, design, implementation, and evaluation in the Sahel. Technicians assist in evaluating program-related activities for loan and grant projects.

Under this RSSA a USDA/OICD technician participated on an interagency assessment team to evaluate World Food Program activities in several West African countries. Countries studied were Ghana, Niger, Mali, and Senegal.

Strengthening African Agricultural Research (SAAR)  
BAF-0435-R-AG-3138

August 1983 - December 1985

The Strengthening of African Agricultural Research (SAAR) Project was a multidonor, multirecipient project to strengthen the capacity of regional and national agricultural research institutions throughout Africa. The aim was to identify and address constraints on food production throughout the continent in a systematic, collaborative fashion. This project was the chief U.S. contribution to the Cooperation for Development in Africa (CDA) agricultural research initiative. The U.S. Department of Agriculture provided various short-term specialists and four long-term specialists on 2-year assignments. They provided technical support for:

- ° Coordinating the overall CDA initiative,
- ° Planning and designing CDA long-term zonal agricultural research programs, and
- ° Designing and managing SAAR subprojects and other CDA-related agricultural research projects and activities.



**\*Staff-Years of Technical Assistance Provided During Fiscal Year 1985 - Asia Area**



\* Includes assignments and TDY's performed by OICD's Worldwide Program Area.

$\Delta$  Countries in which OICD worked less than 1 month are not indicated on the map. These include Brunei, China, Malaysia, Singapore, Taiwan and Western Samoa.

Boundary representation is not necessarily authoritative.

ASIA: USDA TECHNICAL ASSISTANCE PERSONNEL, BY COUNTRY AND PROJECT, FISCAL 1985

<u>Country</u>	<u>Project Title</u>	<u>No. of Technician Assignments</u>			<u>1/</u>
		<u>Long-Term</u>	<u>Short-Term</u>	<u>Total</u>	
Bangladesh	Onfarm Forestry	-	2	2	
China	Composite Plywood (FAO)	-	1	1	
India	Agricultural Research	-	3	3	
Indonesia	Management	1	-	1	
"	Rural Development (Sederhana)	1	-	1	
Nepal	Resources Conservation and Utilization	1	-	1	
"	Watershed Management (FAO)	-	1	1	
Pakistan	Agricultural Research	1	5	6	
"	Cotton Physiology and Agronomy (FAO)	-	1	1	
"	Food Security Management: Data Collection and Analysis	-	4	4	
"	Forestry Planning and Development	1	1	2	
"	Irrigation Systems Management	-	1	1	
"	Onfarm Water Management	-	2	2	
"	Project Design	1	4	5	
"	Tribal Areas Development	3	2	5	
Philippines	Rice Marketing (FAO)	-	1	1	
Thailand	Agricultural Data Processing	-	1	1	
"	Community Development	1	-	1	
Multicountry	ASEAN Plant Quarantine	-	3	3	
"	ASEAN Water Management	1	-	1	
"	ASEAN Watershed Seminar	-	-	-	
"	Southeast Asia Sugarcane Research (FAO)	-	1	1	
U.S. Based	Asia Technical Services	-	12	12	
TOTAL		11	45	56	<u>2/</u>

1/ Individual technicians may have performed more than one assignment.

2/ Technicians on U.S.-based and multicountry projects performed eight international TDY's to eight countries: Brunei, Burma, India, Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

SYNOPSIS OF ASIAN TECHNICAL ASSISTANCE PROJECTS  
IN PROGRESS DURING FISCAL YEAR 1985

Bangladesh-- Onfarm Forestry  
IBD-0249-P-AG-5020

January - March 1985

OICD mobilized a forestry economist and an agro-forestry expert to assist USAID/Dhaka in the design of a 5-year onfarm forestry project promoting the use of nitrogen fixation by trees.

China--Composite Plywood (FAO)

December 1984 - January 1985

USDA's Forest Service provided a forester for a 1-month assignment to China. The purpose of this assignment was to design a technological process for the production of a combined oriented strand board/particle board, taking into consideration the available raw material and other technical restrictions; to prepare specifications for the equipment to be purchased from abroad; and to provide an estimated budget for equipment and a list of manufacturers. A briefing was held in Rome before work began in China.

India--Agricultural Research  
IIN-0470-P-AG-5002

January 1985 - February 1985

The Indian agricultural research project was created under the main umbrella project "Agricultural Research" which was a priority topic of mutual agreement of the Government of India and AID with the endorsement of the Indo-U.S. Subcommittee. USDA/OICD provided three scientists to work with the Indian Council for Agriculture Research (ICAR) on this project. The first scientist was a veterinarian who was experienced in immunology research on haemoprotozoan diseases involving antigen/antibody work with intracellular protista. The main purpose of this assignment was to help increase the qualifications of Indian scientists to perform research studies utilizing relevant methodologies including recent advances in biotechnology. Work under this project will focus on research to control tick-borne haemoprotozoan diseases and effective control mechanism for theileriasis and other haemoprotozoan diseases.

The second scientist provided by OICD was an animal production specialist experienced in microbial degradation of lignocellulose for livestock feeding. His purpose was to provide technologies that could be economically carried out in the rural areas of India. This included creating livestock feeds from wastes consisting of farm plant residue and animal manure using physical, chemical, or microbial treatments. The main objective would be to provide a larger volume of high protein food for human beings through increased livestock and poultry production.



The third scientist on the project was experienced in embryo transfer research involving the buffalo. His work involved using embryo transfer as a tool for genetic manipulation and producing a much greater number of offspring from a genetically valuable female buffalo in a much shorter period of time than was possible with normal reproduction. This research activity will help improve livestock quality and milk production as it benefits the nutritional status of India's human population.

Indonesia--Management  
IID-0308-P-AG-5003

October 1984 - April 1986

An OICD Development Management Specialist is serving as an advisor to Badan Diklat Dalam Negeri (Training Agency of the Ministry of Home Affairs) on methods, systems, and training efforts which will best improve the efficiency of province- and kabupaten-level planning boards.

Indonesia--Rural Development (Sederhana)  
IND-0252-P-AG-2022

June 1982-December 1985

In cooperation with Virginia Tech, OICD posted a rural development specialist in Jakarta to assist with the agricultural portion of this project. The specialist designed programs to improve water management efficiency at the farm as well as district level.

Nepal--Resources Conservation and Utilization Project (RCUP)  
Western Carolina University

March 1983 - April 1985

In 1985, this project concluded and was found to have had a positive impact. The project was led by a senior soil scientist from the Soil Conservation Service of USDA. The emphasis of the project was on soil restoration, conservation of water and soil resources, and training.

Nepal--Watershed Management (FAO)

May 1985 - June 1985

USDA's Forest Service provided a forester for a 2-week assignment in Nepal. The consultancy included collaboration with the course directors in the conduct of the FAO/Finland Training Course in Watershed Management for Asia and the Pacific. The forester also prepared lectures on: shifting cultivation, use of fire, and forest land clearing; water resources conservation and management; forest management systems; and procedures for surveys, planning, and implementation of watershed management projects.

Pakistan--Agricultural Research  
IPK-0296-P-AG-2054

March 1975 - June 1985

The resident station development and operations engineer completed his assignment at the National Agricultural Research Center on March 31, 1985. This assignment included construction of roads, land drainage and reclamation, land development, irrigation, reservoirs, maintenance of farm machinery, building construction, and farm management. Also during this fiscal year, a short-term consultancy took place which provided a laboratory management specialist and an agricultural engineer. This consultancy developed procurement data for the Pakistan Agricultural Research Council (PARC).

Pakistan--Cotton Physiology and Agronomy (FAO)

October 1984 - November 1984

USDA's Agricultural Research Service provided a plant physiologist for a 2-week assignment in Pakistan. The purpose of the assignment was to present lectures on the physiology of cotton floral parts shedding due to high temperatures and drought and the agronomic/cultural methods utilized to reduce the losses in production caused by high temperatures and dry soil conditions. These lectures were given at the International Cotton Physiology and Agronomy Workshop.

Pakistan--Food Security Management: Data Collection and Analysis

IPK-0491-P-AG-5019

March 1985 - June 1990

Through substantial negotiations and efforts, a Data Collection and Analysis Component of the Food Security Management (FSM) Project has been established. OICD is providing USDA technicians whose main objective is the establishment of a data system that will provide timely and reliable agricultural data to the Government of Pakistan for policy and planning decisions.

To date, OICD has provided numerous USDA agricultural statisticians who are establishing an area frame laboratory. Also, logistical support, i.e., computer software, survey equipment (map materials, palmeters, etc.), Landsat imagery, is currently being supplied. Two USDA statisticians have been identified for resident assignments and both should be in place by the summer of 1986.

Pakistan--Forestry Planning and Development

IPK-0481-P-AG-4245

August 1984 - June 1985

OICD provided a professional forester to assist USAID/Islamabad with the design of a forestry planning project. The project has been approved, and the AID Mission has hired a full-time forester to manage it at mission level.

Pakistan--Irrigation Systems Management  
IPK-0467-P-AG-5024

January - February 1985

At the request of USAID Pakistan, OICD identified and recruited an irrigation systems specialist to head the interim evaluation of this project, which is now in its second year. The project provides assistance to the Government of Pakistan to rehabilitate deteriorated surface irrigation and drainage systems and to improve Pakistan's institutional capacity to operate and maintain the systems and conduct research on irrigation. The specialist spent approximately 7 weeks as team leader on the evaluation and drafted recommendations which led to refinement of certain project objectives.

Pakistan--Onfarm Water Management  
IPK-0000-P-AG-4015

October 1984

The USDA Soil Conservation Service conducted two sessions of a course developed to stress onfarm water management. The course was presented by national experts from SCS, including engineers, hydrologists, and irrigation specialists.

Pakistan--Project Design  
IPK-0470-P-AG-2133

April 1982 - January 1985

This project concluded successfully with the completion of a commodity stock management study. The study produced a model for Pakistan's edible oil supply, including production, processing, marketing, and import parameters.

Pakistan--Tribal Areas Development  
IPK-0471-P-AG-3156

August 1983 - June 1986

Three resident advisors arrived in the tribal areas of Pakistan in October 1983. Two of the advisors have now completed their 2-year assignments and have returned to the United States. The third advisor, an engineering geologist, will remain for an additional 6 months. In June 1985, USDA's Soil Conservation Service (SCS) provided an irrigation engineer to visit the project to identify potential water development projects, irrigation and drainage, in the tribal areas and to address the engineering needs to redirect the Bara watercourse program to the development of potential water development projects.

Philippines--Rice Marketing (FAO)

August - October 1985

USDA's Federal Crop Insurance Corporation (FCIC) provided a crop insurance underwriter for a month assignment to the Philippines. The purpose of this assignment was to review present government pricing policies and recommend an appropriate payment scheme suited to the new grading system for rice.



Thailand--Agricultural Data Processing  
AID University Contract

August 1985

USDA's Statistical Reporting Service (SRS) provided a statistician for a 1-month assignment in Bangkok to install statistical software on microcomputers in the Thailand Agricultural Economics Office.

Thailand--Community Development  
THA-0000-P-AG-1038

April 1982 - September 1986

A resident specialist continues to assist the AID Mission in agricultural project planning and evaluation. Stationed in the northeast city of Khon Kaen, the resident has strengthened the extension network in his district, and introduced new approaches to dry-season agriculture.

ASEAN--Plant Quarantine  
BAS-0258-P-AG-1034

July 1981 - May 1985

USDA's Agricultural Research Service (ARS) provided an entomologist for a 6-week assignment to Malaysia, Thailand, Indonesia, the Philippines, Singapore, and Brunei. The purpose of the assignment was to evaluate the effects that phasing out the use of ethylene dibromide would have on trade in agricultural products in these countries; recommend alternative treatments for fresh fruits and plant products intended for consumption; study the feasibility of gamma irradiation as a suitable treatment for disinfestation of plant products intended for consumption; and recommend guidelines on safety precautions in the use of irradiation as necessary.

A second short-term assignment under this project was for a plant quarantine specialist to travel to the Philippines and Malaysia. The purpose of this assignment was to evaluate the project activities carried out by the Plant Quarantine Center and Training Institute (PLANTI) and to recommend proposals for the funding of PLANTI after the completion of the initial phase of the project, 1980-85.

The third short-term assignment was for another entomologist to go to Malaysia, Thailand, Indonesia, Brunei, Singapore, and the Philippines. The purpose was to evaluate exotic insect A1 and A2 ASEAN pest lists; and to recommend facilities and equipment needed at main plant quarantine (PQ) entry points for inspection and treatment; to examine provisions in PQ laws/decrees to streamline ASEAN PQ activities; to propose strategies for standardizing PQ activities in ASEAN; and to examine the content of a syllabus for entomology for the certificate and diploma courses conducted at PLANTI.

A multiyear PASA was signed to put a resident technician in Los Banos, the Philippines. USDA's Extension Service provided a watershed management specialist for this 2-year assignment as Project Liaison Specialist (PLS). The PLS is to assist in coordinating training activities in the ASEAN Watershed Project, act as liaison with AID/Washington in developing a research network, assist in obtaining external consultants needed for project activities, and provide service to both headquarters and member countries in design, development, and operation of the project's training and information exchange component. Short-term TDY assistance will be provided during the lifetime of the project.

ASEAN--Watershed Seminar  
IAS-0258-P-AG-5053

May 1985 - July 1985

With the assistance of the University of Michigan and USDA's Forest Service, 17 ASEAN participants traveled to the United States and Mexico to attend the Water Research Management and Administration Seminar and the World Forestry Congress in Mexico City. The U.S. seminar and study tour included stops at the East West Center, Honolulu, Hawaii; Oregon State University and the USDA Forest Service in Corvallis, Oregon; Agricultural Erosion Piedmont Station in Watkinsville, Georgia; Coweeta Hydrological Laboratory, Clemson, South Carolina; University of Tennessee, Tennessee Valley Authority, Norris Dam and Tellico Dam in Tennessee; and AID and USDA offices in Washington, D.C.

Southeast Asia--Sugarcane Research (FAO)

May 1985 - June 1985

USDA's Agricultural Research Service provided a research agronomist for a 3-week assignment in Indonesia and Pakistan. The purpose of the assignment was to assess the present status of sugarcane research and breeding programs in Indonesia and Pakistan and to assess the present training programs related to sugarcane development and technology transfer. At the conclusion of the trip, a written report was submitted to FAO with findings and recommendations on improving research and training to develop sugarcane production in Indonesia and Pakistan.

Asia--Technical Services  
BAS-0249-R-AG-1078

July 1981 - Ongoing

This agreement provides for the technical services of agricultural and/or rural development specialists. Their responsibilities are to assist in formulating, designing, and preparing documentation for proposed projects, carrying out and evaluating ongoing projects, and other appropriate program-related activities of AID's Asia Bureau. Short-term services under this agreement have included providing a

research assistant to the Asia Bureau to work on water management and other agricultural activities, which included preparing document drafts and other materials for internal use; providing two experts to be speakers and session moderators at the Agriculture and Rural Development Technical Training Workshop; providing three experts to attend a seminar and brief AID/Washington personnel on their findings on the Assessment of India Irrigation Sector Strategy; providing the services of a computer company to assist Asia Bureau in accessing a computer-based monitoring and tracking system for Water Management Synthesis II (WMS-II) project activities and a computer-based roster of water management specialists; sending a two-person team to Burma as members of an AID/Washington review team assembled to undertake a strategy review of AID/Burma's current agricultural sector strategy; providing an agricultural economist to assist AID/Washington in developing background material in preparation for the Asia Bureau's Country Development Strategy Statement Program Week for selected Asia Bureau countries; providing a marketing advisor to the Philippines to assist the farming systems research and development component in the conduct of the marketing assessment in Region V; and providing a consultant to India to assist in the preparation of the National Social Forestry Project Paper.



**\*Staff-Years of Technical Assistance Provided During Fiscal Year 1985 - Latin America Area**



\* Includes assignments and TDY's performed by OICD's Worldwide Program Area.

\* Portugal is included in Latin America Programs for administrative purposes.

<sup>Δ</sup> Countries in which OICD worked less than 1 month are not indicated on the map. These include Chile, El Salvador, Trinidad and Venezuela. Time is not shown for countries receiving less than three months of technical assistance.

Boundary representation is not necessarily authoritative.

LATIN AMERICA: USDA TECHNICAL ASSISTANCE PERSONNEL, BY COUNTRY AND PROJECT, FISCAL 1985

<u>Country</u>	<u>Project Title</u>	<u>No. of Technician Assignments</u>			<u>1/</u>
		<u>Long-Term</u>	<u>Short-Term</u>	<u>Total</u>	
Barbados	Agricultural Extension	-	1	1	
Belize	Acting Agricultural Development Officer	-	2	2	
"	Agricultural Diversification Project Paper	-	5	5	
Costa Rica	Agricultural Survey	-	1	1	
Dominican Rep.	Agricultural Extension PID	-	1	1	
"	Natural Resource Management	-	5	5	
"	Natural Resources	1	-	1	
"	Small Farm Swine Repopulation Evaluation	-	1	1	
Ecuador	Drainage and Flood Control (World Bank)	-	1	1	
"	Forestry	-	14	14	
"	Melon Inspection	-	1	1	
Grenada	Agricultural Engineering	1	-	1	
Guatemala	Agricultural Survey	-	3	3	
"	Small Farmer Diversification	4	10	14	
Haiti	Agribusiness	-	7	7	
"	Agricultural Survey	-	5	5	
"	Export Producers Association Workshop	-	3	3	
"	Sweet Potato Production	-	1	1	
"	Vegetable Export Study	-	1	1	
Honduras	Agricultural Cooperatives	1	-	1	
"	Agricultural Credit	1	-	1	
"	Agricultural Research	1	-	1	
"	Animal Procurement	-	1	1	
"	Forestry	1	-	1	
"	Livestock Improvement	1	-	1	
"	Natural Resources Development	1	-	1	
"	Sample Design Frame	-	8	8	
Jamaica	Agricultural Markets	-	2	2	
"	Agro-Industrial Development (Agro 21)	-	4	4	
"	Caprine Arthritis and Encephalitis	-	1	1	
"	Fumigation/Certification	1	2	3	
"	Natural Resources Assessment (CRIES)	-	4	4	
Mexico	Africanized Bees (FAO)	-	1	1	
"	Engineering Appraisals (World Bank)	-	1	1	
"	Forestry	-	1	1	
"	Soil Conservation (World Bank)	4	6	10	

See footnotes at end of table.

Continued

LATIN AMERICA: USDA TECHNICAL ASSISTANCE PERSONNEL,  
BY COUNTRY AND PROJECT, FISCAL 1985--CONTINUED

<u>Country</u>	<u>Project Title</u>	<u>No. of Technician Assignments</u>			<u>1/</u>
		<u>Long-Term</u>	<u>Short-Term</u>	<u>Total</u>	
Panama	Environmental Management Systems (Mangrove)	-	5	5	
Paraguay	Minifundia Crop Intensification	1	-	1	
Peru	Agricultural Statistics	2	2	4	
"	Soil Conservation	2	2	4	
Portugal <u>2/</u>	Agricultural Production	3	25	28	
"	Fire Management	-	2	2	
St. Kitts	Wildlife Assessment	-	2	2	
Uruguay	Laboratory Management (FAO)	-	4	4	
Multicountry	Caribbean Forestry	-	1	1	
"	Caribbean Plant Quarantine	-	1	1	
"	Caribbean Marketing Intelligence Seminar	-	1	1	
"	Ecuador/Peru Plant Breeding (IAEA)	-	2	2	
U.S.-Based	Latin America Sector Assessment	5	6	11	
" "	Latin America/Caribbean Crop Credit Insurance Systems	<u>1</u>	<u>-</u>	<u>1</u>	
TOTAL		31	146	177	<u>3/</u>

1/ Individual technicians may have performed more than one assignment.

2/ Portugal projects are handled by the Latin America program area since Technical Assistance Division does not have a Western European area.

3/ In addition, U.S.-based personnel performed 16 international TDY's to 11 countries: Belize, Bolivia, Brazil, Costa Rica, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Mexico, and Peru.



SYNOPSIS OF LATIN AMERICA AREA TECHNICAL ASSISTANCE PROJECTS  
IN PROGRESS DURING FISCAL 1985

Barbados--Agricultural Extension  
IRD-0000-P-AG-5101

August 1985

USDA/ES provided the services of an extension development specialist to help the Caribbean Rural Development Office's Agricultural Division amend and extend the Caribbean Agricultural Extension Project, Phase II.

Belize--Acting Agricultural Development Officer  
AID Mission Funded

September - October 1984

USDA/ERS provided the services of an Agricultural Economist to serve as the Acting Agricultural Development Officer and to assist in supervising an agricultural sector assessment being carried out by the Mid-Western Universities Consortia for International Agriculture (MUCIA).

Belize--Agricultural Diversification Project Paper  
IBZ-0000-P-AG-5069

April - July 1985

USDA/OICD provided a design team to prepare the project paper for the Agricultural Diversification Project. The team consisted of a management specialist, an agricultural marketing specialist, and a research management specialist.

Costa Rica--Agricultural Survey  
ICR-0000-P-AG-5027

January - February 1985

USDA/SRS provided the services of a statistician to assist the National Statistics and Census Institute in the first of a series of agricultural surveys to be utilized for agricultural policy planning. These surveys are required under the Self-Help Measure, No. 4b of a P.L. 480 Title I Sales Agreement between the United States and Costa Rica.

Dominican Republic--Agricultural Extension PID  
IDR-0000-P-AG-5010

September - October 1984

USDA/OICD provided the services of an agricultural economist to lead a three-person team in developing a Project Identification Document (PID) on agricultural research and extension.

Dominican Republic--Natural Resources Management

IDO-0126-P-AG-3046

April 1983 - July 1986

USDA/SCS is providing ongoing short-term technical assistance to the Dominican Republic's soil and water conservation efforts. Soil conservationists and training specialists are continuing to provide support to the Land and Water Department of the Subsecretariat of Natural Resources to upgrade its soils laboratory, review soil survey techniques, and conduct workshops.

Dominican Republic--Natural Resources

IDO-0000-P-AG-2243

October 1980 - July 1987

USDA/ES is providing the long-term services of a natural resource economist to assist USAID and the multidisciplinary Resources Inventory and Analysis Unit of the Ministry of Agriculture in the Dominican Republic in the planning and designing of technologically sound, administratively viable, and economically feasible natural resources management activities.

Dominican Republic--Small Farm Swine Repopulation Evaluation

IDO-0000-P-AG-5050

January - February 1985

USDA/ES provided the services of a livestock specialist who participated on the evaluation team for the Small Farmer Swine Repopulation Project. The evaluation was intended to determine the effectiveness of the project, including the impact on the lives of small farmers and changes in their incomes or production capacities.

Ecuador--Drainage and Flood Control

World Bank

September - October 1985

USDA/SCS provided the services of a national drainage engineer to study drainage and flood control for the Ecuador Lower Guyas Project.

Ecuador--Forestry

IEC-0023-P-AG-4087

September 1984 - March 1988

Technical expertise in the areas of pathology, extension, training, watershed management, dryland and tropical forestry, anthropology, computer science, and forest harvesting will be provided by USDA/FS to assist the National Forestry Program. The objective is to strengthen the capacity to mobilize, coordinate, and supply technical assistance to other institutions in the forestry sector, execute a program of applied silvicultural research and field demonstrations, and increase the Government of Ecuador's capability to develop and execute plans to delineate and manage forest areas within critical watersheds.

Ecuador--Melon Inspection  
IEC-0000-P-AG-5013

December 1984 - January 1986

USDA/APHIS provided the services of a plant protection and quarantine officer to assist the Ministerio de Agricultura y Ganaderia, Plant Health Department, to inspect melons in Guayaquil, Ecuador, for preclearance certification. This permits the melons to enter the United States at north Atlantic ports without further delay.

Grenada--Agricultural Engineering  
IGD-0006-P-AG-4094

June 1984 - July 1985

USDA/FS provided the long-term services of a civil engineer for the Point Salinas project in Grenada.

Guatemala--Agricultural Survey  
IGI-0000-P-AG-5029

April 1985 - February 1986

USDA/SRS is providing technical assistance in support of the area frame construction and nationwide survey to be carried out by the Guatemalan Ministry of Agriculture, Livestock, and Food (MAGA). This survey will provide MAGA and USAID with much needed statistics on agricultural production, inputs used, and cropping patterns.

Guatemala--Small Farmer Diversification  
IGT-0255-P-AG-3132

November 1983 - March 1987

USDA is currently undertaking a Small Farmer Diversification Project located in the northwestern highlands of Guatemala to improve the economic well-being of rural Guatemalans living in that area. In support of this goal, the project will strengthen the public agricultural sector's capacity to stimulate small farm diversification from basic grains to the production of higher value diversified crops which are more labor intensive. Hence, the project will generate increased on-farm employment opportunities and raise small farmer incomes.

The project is a logical continuation of an earlier OICD project (the Small Farmer Irrigation and Soil Conservation Project) under which small-scale irrigation and soil/water conservation systems were developed and tested. This new project will focus on the transfer of this technology to small farmers by providing technical assistance and financing to train project extensionists as well as credit funds to finance the irrigation and soil conservation infrastructure. Therefore, the project seems to have a high probability of success.



Currently in place are the team leader, farming systems advisor, vegetable horticulturist, and the livestock specialist. It is anticipated that a fruit horticulturist, a marketing specialist, and a communications specialist will be added in the early part of FY86.

Haiti--Agribusiness  
IHT-0000-P-AG-5077

July - September 1985

Funding was provided for travel and services of U.S. personnel in connection with an agri-business workshop held in Haiti in August 1985. The workshop exposed Haitian agricultural producers to the possibilities of exporting and the requirements of foreign markets. Haiti, despite its climate, geographical location, and proximity to large U.S. markets, currently does not make use of its potential substantial competitive advantage over other Latin American countries in sales of perishable horticultural exports.

Haiti--Agricultural Survey  
IHT-0092-P-AG-5066

April 1985 - April 1987

USDA/SRS is providing short-term technical assistance over the life of this project to Haiti's Ministry of Agriculture in modernizing its agricultural statistics collection capability by developing agricultural statistics gathering and analysis techniques in Haiti.

Haiti--Export Producer's Workshop  
IHT-0000-P-AG-5076

June - September 1985

USDA/OICD provided the services of an agribusiness specialist to assist USAID/Haiti in the preparation and sponsorship of the agribusiness workshop as described above (see "Haiti--Agribusiness").

Haiti--Sweet Potato Production  
IHT-0078-P-AG-5048

April 1985

USDA/ARS provided the services of a tropical roots and tuber crop specialist to present three short courses on the production and use of sweet potatoes. These courses were designed to develop in Haiti a greater appreciation of the sweet potato as a potentially major food for the country and to introduce new sweet potatoes and processes developed in Puerto Rico.

Haiti--Vegetable Export Study  
IHT-0000-P-AG-5033

February - March 1985

USDA/OICD provided the services of an agricultural marketing specialist to evaluate the agronomic potential for producing fruits and vegetables, assess the potential for export in a quality product, and to suggest a

development strategy. This is part of Haiti's increasing focus on promoting diversification of small farmer agricultural production in order to expand the range and volume of Haitian agricultural products.

Honduras--Agricultural Cooperatives

IHN-0000-P-AG-3148

March 1983 - July 1987

USDA/ES is providing the services of a cooperatives advisor to serve as the agrarian reform and land/landless projects specialist assisting the Government of Honduras' Instituto Nacional Agrario (INA). He is the principal liaison for all matters related to agrarian reform between USAID/Tegucigalpa, INA, and other Honduran agencies, as well as manager for the Small Farmer Titling Project.

Honduras--Agricultural Credit

IHN-0178-P-AG-3115

March 1981 - July 1987

USDA/ES is providing long-term technical assistance in agricultural credit to USAID/Tegucigalpa and to the National Agricultural Development Bank (BANADESA) to improve management of national credit programs. Through this it is hoped that the small farmers will be provided with timely and properly managed credit resources.

Honduras--Agricultural Research

IHN-0249-P-AG-5022

April 1985 - March 1987

USDA/ES is providing the long-term services of an agricultural research officer to assist the Government of Honduras in the Honduran Agricultural Research Foundation (FHIA) Project. The FHIA will expand and improve the agricultural research system in the country and enable it to be more responsive to the technological needs of farmers, particularly those producing nontraditional crops for export.

Honduras--Animal Procurement

AID Mission Funded

December 1984

USDA/ES provided the services of a livestock specialist to review animal procurement proposed by Fondo Ganadero, a private sector corporation. (See "Honduras Livestock Improvement" below.)

Honduras--Forestry

IHN-0000-P-AG-3045

November 1982 - March 1987

USDA/FS is providing the long-term services of a rural roads engineer to advise the USAID mission on all AID-funded rural roads projects. Support is also being provided to host government officials on procedures and techniques for constructing and maintaining rural and secondary roads in Honduras.

Honduras--Livestock Improvement  
IHN-0209-P-AG-4088

November 1984 - September 1990

USDA/ES is providing the long-term services of a livestock specialist to assist the Government of Honduras in the Small Farmer Livestock Improvement Project. Under the project the Fondo Ganadero of Honduras, a private sector corporation, is being developed. This corporation will lend livestock on an in-kind basis to small farmers, operate a livestock training program for participants, provide livestock technical services (extension, veterinary, etc.), and operate a small credit program for livestock infrastructure improvement.

Honduras--Natural Resources Development  
IHN-0000-P-AG-3060

April 1982 - July 1987

USDA/ES is providing a Natural Resources Scientist on a long-term basis to assist the Honduran Office of Environment and Technology in natural resource and watershed management. Under natural resources, this includes instituting improved natural resource management systems in at least four sub-watershed areas of the Choluteca River Watershed (including watershed management, fuelwood, plantations, land reclamation, social and policy aspects of resource management, natural resource data collection systems, and increased field monitoring). Under watershed management, the project includes development of a master plan for irrigation and drainage, the consolidation of existing irrigation systems, and the creation of low-cost irrigation development teams.

Honduras--Sample Design Frame  
IHN-0150-P-AG-4269

September 1984 - December 1985

USDA/SRS is providing the short-term services of two mathematical statisticians to assist the General Directorate of Statistics and Census of the Government of Honduras in the implementation of the National Agricultural Survey.

Jamaica--Agricultural Markets  
IJA-0060-P-AG-4258

September - October 1984

USDA/OICD provided two instructors to present the USDA short course in Developing Markets for Agricultural Production. Twenty participants from the Ministry of Agriculture, Marketing Division, took part in this 3-week course.

Jamaica--Agro-Industrial Development (Agro 21)  
IJM-0081-P-AG-5037

March 1985 - March 1988

At the request of USAID/Kingston, USDA will be providing short-term technical assistance to help the Agro 21 Secretariat, Government of



Jamaica, implement the Agro-Industrial Development Component II Project. This assistance is in areas of agricultural credit, plant quarantine, agricultural policy, tropical crops adaptation, plant materials multiplication, and livestock extension.

The principal goal of Agro 21 is to stem the decline of traditional agriculture throughout the island nation and bring back to viable levels the export earning capacity of the sector. It seeks to:

- ° Establish an attractive investment environment in agriculture;
- ° Stem the decline in the value of Jamaica's agricultural exports and make agriculture a strong foreign exchange earner;
- ° Make improvements in the level of cost-effective technology available to Jamaican farmers and processors;
- ° Facilitate the introduction of nontraditional crops to reduce Jamaica's vulnerability to world market fluctuations; and,
- ° Contribute to improving Jamaica's balance of payments position.

Jamaica--Caprine Arthritis and Encephalitis

Mission Funded

October - November 1984

USDA/ARS provided the short-term services of a veterinary medical officer to perform the sero-diagnostic test for caprine arthritis and encephalitis (CAE) due to a recent outbreak of the disease in Jamaica.

Jamaica--Fumigation/Certification

IJM-0079-P-AG-3049

March 1983 - May 1986

USDA/APHIS is providing short- and long-term technical assistance in the design and construction of a produce fumigation facility in Jamaica to initiate that country's program for preclearance fumigation for produce exports.

Jamaica--Natural Resources Assessment (CRIES)

IJM-0079-P-AG-3094

October 1981 - June 1985

USDA/SCS and Michigan State University's Comprehensive Resource Inventory and Evaluation System (CRIES) assisted in refining the computer-based information system in the Jamaican Ministry of Agriculture's Rural Physical Planning Unit. The project provided critical information to evaluate development alternatives and gave related guidelines for policy development.

Mexico--Africanized Bees (FAO)

August 1985

USDA/ARS provided the services of a research chemist to assist FAO in the identification of Africanized bees in Mexico through gas chromatograph.

Mexico--Engineering Appraisals  
World Bank

May - June 1985

USDA/SCS provided the services of a national drainage engineer to conduct engineering appraisals in Mexico under the Tropical Agricultural II Project Evaluation.

Mexico--Forestry  
BLA-0616-P-AG-5081

August 1985 - December 1987

USDA/FS is providing both short- and long-term services to Mexico to better the management and utilization of forests in that country and establish programs to train Mexicans and technicians from AID countries in the region in forest technology. Particular areas of assistance include (a) seed collection, handling, and storage; (b) nursery establishment and management; (c) reforestation, including site preparation; (d) forest protection, including fire management and wildfire suppression; (e) stand management; (f) seed zone and orchard establishment; (g) resource management planning including watershed management; (h) harvesting; (i) utilization and processing; (j) marketing; and (k) research.

Mexico--Soil Conservation  
World Bank

January 1983 - July 1986

USDA/OICD is carrying out a long-term soil conservation project in Mexico under a reimbursable agreement between the U.S. Department of Agriculture and the World Bank (IBRD). It is a part of the IBRD loan funded Tropical Agriculture Project and the Integrated Rural Development Program in the Humid Tropics (PRODERITH), which is under the Mexican Secretariat of Agriculture. USDA's Soil Conservation Service is providing four resident specialists - a soil conservationist/agronomist, a plant materials specialist, a civil engineer, and a soil scientist.

Various other short-term consultants have rounded out the USDA project to support PRODERITH's efforts related to drainage, water control, erosion control, grazing lands management, and soil management planning. The overall goal is to increase productivity by improving the technological and management capability of the Mexican technicians and farmers. Demonstration project sites have been developed for erosion control system trials.

Meetings held during the summer of 1985 with Carlos Vidale, Director General for Foreign Affairs, focused on Mexico's interest in additional USDA technical assistance in other agricultural fields supported by multilateral funding institutions. Vidale's past estimates have shown assistance could reach as high as 20 full-time personnel.

Panama--Environmental Management Systems (Mangrove)

BLA-0605-P-AG-4239

September 1984 - April 1985

USDA/FS is providing the short-term services of agricultural experts to assist in improving the capability of the Government of Panama to manage its mangrove resources for multiple, sustainable uses. Effective management should lead to a reduction in the exploitative use of mangrove forests and associated wetlands, and to a resolution of current and potential conflicts in the use of these resources.

Paraguay--Minifundia Crop Intensification

IPY-0118-P-AG-3035

January 1983 - December 1984

USDA/ES provided the long-term technical services of a marketing economist to assist the produce marketing program of CREDICOOP (the Paraguayan national credit union organization). The initial focus was on developing the domestic market for tomatoes and bananas.

Peru--Agricultural Statistics

IPE-0238-P-AG-4203

July 1984 - December 1988

USDA/SRS has embarked on a long-term project for a continuous system of area and production statistics as part of USAID's Agricultural Planning and Institutional Development Project. A resident agricultural statistician and a sampling frame technician will provide technical assistance for a 3-year period beginning July 1984. The continuous system will collect and summarize data every 6 months until a fully operational data collection system is installed by the end of the second year. The initial data to be provided will fulfill the priority needs of the Ministry of Agriculture. The project's overall objective is to furnish information support to manage agricultural policy and planning.

Peru--Soil Conservation

IPE-0220-P-AG-1066

January 1982 - June 1986

USDA/SCS is providing long-term technical assistance to the Government of Peru in strengthening and institutionalizing a soil and water conservation system within the Directorate of Water and Soils of the Ministry of Agriculture (DGASI). The first comprehensive farm level soil conservation project for the sierra was established. Technical assistance is being provided to the DGASI Project Unit in practices of soil conservation and methods of getting farmers to put those practices into use on their farms. The project has increased the number of



technicians and trained farmers and has established administrative and financial procedures required to support field agents. The project has been rated as a major success in Peru's agricultural development.

Portugal--Agricultural Production  
IPT-0023-P-AG-1028

December 1980 - December 1987

USDA/OICD is providing three resident specialists to the Portuguese Ministry of Agriculture, Commerce, and Fisheries as well as numerous short-term consultants with an eye to (1) improving agricultural production in Portugal through increased limestone and fertilizer usage, particularly in forage crops in northern Portugal and (2) improving the agricultural policy decisionmaking processes. To further these goals, technical assistance is provided in the areas of agricultural policy, agricultural research, small farmer credit, project management, raising of small ruminants, farming systems research, agricultural marketing, training, extension, and limestone production and distribution studies.

Portugal--Fire Management  
IPT-0001-P-AG-2088

May 1982 - December 1984

USDA/FS provided the services of a fire management officer and a forester to present a course to the Portuguese national forest fire captains to improve Portuguese capabilities to manage firefighting operations.

St. Kitts--Wildlife Assessment  
IBB-0000-P-AG-5071

June - July 1985

USDA/FS provided two biological technicians to conduct a wildlife assessment on the St. Kitts southeast peninsula prior to planned development and road construction. The assessment, which was to study how such development would affect wildlife patterns, included defining the major habitat requirements for each animal species, pointing out those species particularly sensitive to reduced areas of habitat and to human disturbance as well as those of particular importance as potential harvestable species or pollinators, and recommending possible wildlife conservation legislation.

Uruguay--Laboratory Management (FAO)

April 1985 - May 1986

USDA/FSIS and ARS are providing short-term technical assistance on an FAO-sponsored project involving the Laboratorio de Carnes del CIVET, Uruguay's Quality Control Laboratory for Meat and Meat Products for national consumption and export. This assistance includes a laboratory management consultant to evaluate the space, supplies, equipment, and present staff of the lab; a physical-chemical consultant; and a microbiologist to develop and improve the microbiological analysis of meat, poultry, and water samples.

Caribbean--Forestry  
BLA-0605-P-AG-2235

August 1983 - December 1986

USDA/OICD and the Forest Service's Institute of Tropical Forestry in Puerto Rico are continuing to provide short-term support under the Development of Environmental Management Systems Project. This program is designed to assist the Caribbean islands of Barbados, St. Vincent, Dominica, Antigua, and St. Lucia in planning and assuming their role in development and improving their response to human and natural perturbations. Emphasis has been placed on wildlife and watershed management.

Caribbean--Plant Quarantine  
AID Mission Funded

November 1984

USDA/APHIS provided the services of a plant quarantine specialist to: (a) assess quarantine needs at all points of entry into Grenada; (b) serve as an overall resource person on quarantine matters to the Ministry of Agriculture; (c) identify special needs in quarantine training; and (d) advise on proper procedures for conducting surveys of fruit flies specifically, and other pests, as required to obtain APHIS certification.

Caribbean--Regional Marketing Intelligence Seminar

AID Mission Funded

January 1985

USDA/OICD provided the services of an agricultural economist to attend the Caribbean Region Agricultural Market Intelligence Seminar in Barbados. The seminar was sponsored jointly by USAID and the Barbados Marketing Corporation.

Ecuador and Peru--Plant Breeding

International Atomic Energy Agency

November 1984 - March 1985

USDA/ARS provided the short-term services of a research geneticist to consult with officials of the International Atomic Energy Agency (IAEA) in Ecuador, prior to his arrival in Peru to advise the IAEA on their wheat breeding program there.

Latin America--Sector Assessment

BLA-0000-R-AG-3167

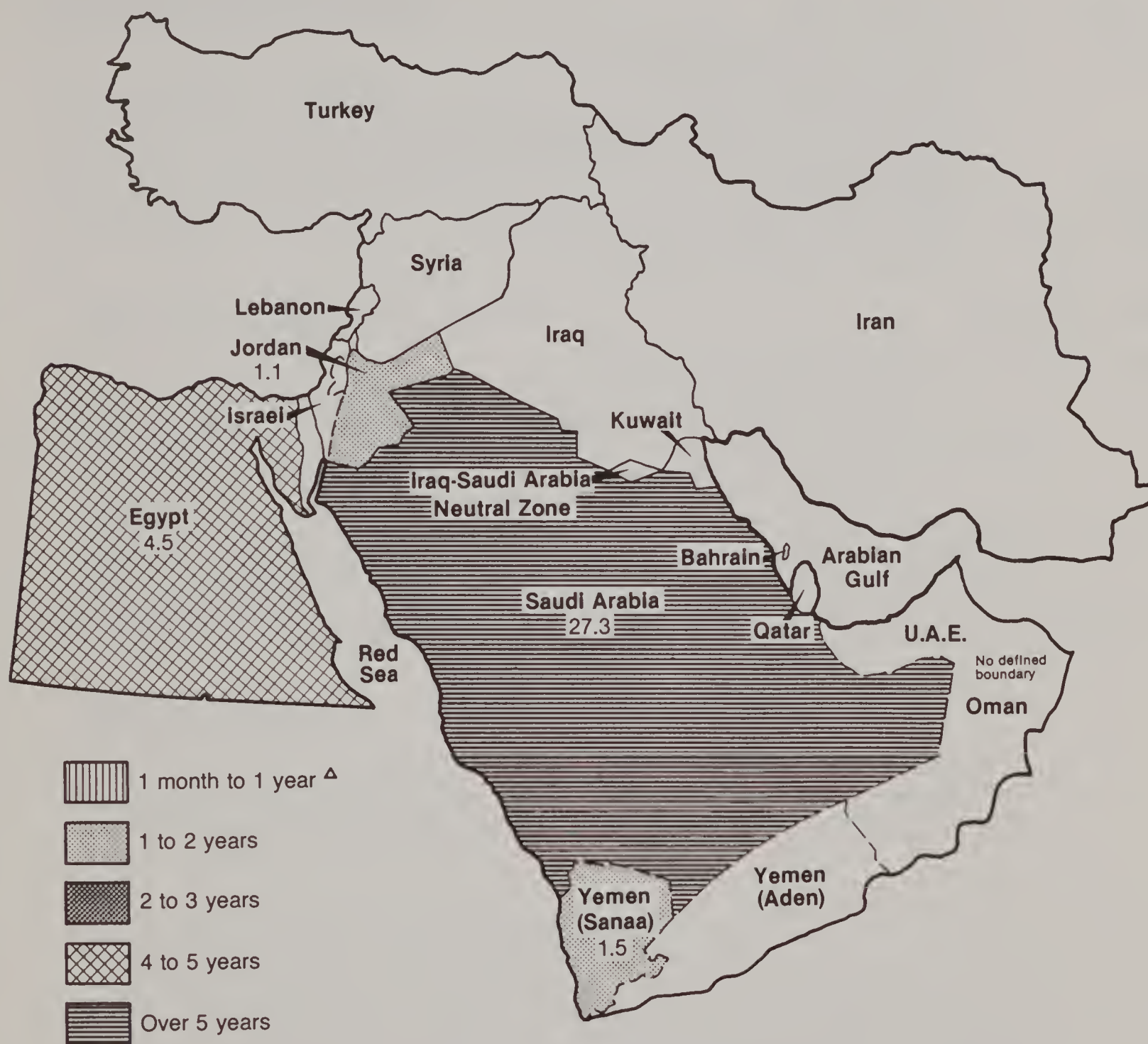
September 1976 - September 1986

Long- and short-term analytical support is being provided to AID/Washington and overseas missions in designing, implementing, and evaluating rural development projects. Support focuses on the goals of upgrading diets and improving agricultural production and living standards for rural populations in Latin America.

USDA/FCIC provided short- and long-term technical assistance to enable small farmers throughout Latin America to obtain crop credit insurance. USDA supported the efforts of individual countries to initiate, maintain, and sustain their crop insurance programs.



## \*Staff-Years of Technical Assistance Provided During Fiscal Year 1985 - Middle East Area



\* Includes assignments and TDY's performed by OICD's Worldwide Program Area.

$\Delta$  Countries in which OICD worked less than 1 month are not indicated on the map. These include Cyprus, Greece, Syria, Turkey and United Arab Emirates.

Boundary representation is not necessarily authoritative.

MIDDLE EAST: USDA TECHNICAL ASSISTANCE PERSONNEL, BY COUNTRY AND PROJECT, FISCAL 1985

<u>Country</u>	<u>Project Title</u>	<u>No. of Technician Assignments</u>			<u>1/</u>
		<u>Long-Term</u>	<u>Short-Term</u>	<u>Total</u>	
Egypt	Agricultural Engineering Advisor	1	-	1	
"	Data Collection and Analysis	1	30	31	
"	Futures Market	-	1	1	
"	Mediterranean Fruit Fly Eradication (IAEA)	-	1	1	
"	National Agr'l. Production Program Proposal	-	5	5	
Jordan	Project Manager	1	-	1	
Yemen	Agricultural Support	1	-	1	
Multicountry	Israel-Egypt-U.S. Trinational Research				
U.S.-based	Near East Technical Services	2	6	8	
<u>Joint Commission</u>					
Saudi Arabia	Agriculture and Water Project	<u>32</u>	<u>5</u>	<u>37</u>	
	TOTAL	38	48	86	<u>2/</u>

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1/ Individual technicians may have performed more than one assignment.

2/ In addition, U.S.-based personnel performed 5 international TDY's to 8 countries: United Kingdom, France, Germany, Italy, Jordan, the Netherlands, Syria, and Yemen.

SYNOPSIS OF MIDDLE EASTERN TECHNICAL ASSISTANCE PROJECTS  
IN PROGRESS DURING FISCAL 1985

Egypt--Agricultural Engineering Advisor

IEG-0000-P-AG-2259

July 1983 - August 1987

An agricultural engineer from the Soil Conservation Service specializing in irrigation is serving as an advisor to the Egyptian Ministry of Irrigation and USAID/Cairo under the larger USAID/Cairo-funded Irrigation Management Systems (IMS) Project. The advisor's objectives are to interpret and analyze technical, social, and economic factors that affect the Egyptian irrigation system and the implementation of the IMS Project.

Egypt--Data Collection and Analysis

EGY-0142-P-AG-1060

May 1981 - August 1986

Under a 5-year agreement with USAID/Cairo, USDA economists and statisticians are assisting the Agricultural Economics Research Institute of the Ministry of Agriculture. The objective of this project is to work with Egyptian counterparts to develop the staff and institutional capacity to generate timely, reliable agricultural statistics to use in planning and decisionmaking for economic research. Under this same project, OICD is mobilizing various short-term experts from USDA to assist the Ministry in procurement and training to develop a computer center.

Egypt--Futures Market

IEG-0041-P-AG-4270

February 1985

A USDA/ERS agricultural economist was mobilized under this agreement to advise Ministry of Agriculture counterparts on planning strategies to address Egyptian decisionmaking regarding the use of futures markets to import agricultural commodities.

Egypt--Mediterranean Fruit Fly Eradication

International Atomic Energy Agency (IAEA) April - May 1985

A USDA/APHIS senior staff officer advised Ministry of Agriculture counterparts on the development of regulations and policy guidelines for the Mediterranean fruit fly eradication program funded by the United Nations Development Programme.



Egypt--National Agricultural Production Program Proposal  
IEG-0042-P-AG-5035 February - September 1985

OICD helped USAID/Cairo design a large agricultural development project to assist the Government of Egypt in increasing agricultural production. Short-term assistance was provided in the areas of agricultural extension and research, data collection and analysis, and agribusiness.

Jordan--Project Manager  
IJO-0000-P-AG-2234 August 1981 August 1986

USDA has recently assigned an agronomist to replace an OICD agricultural economist who has returned after the successful completion of his 2-year tour. The agronomist is on a 2-year resident assignment to assist the Central Development Office in planning, carrying out, and evaluating agricultural projects in Jordan, and to manage specific agricultural projects and activities assigned by USAID/Jordan.

OICD has helped prepare feasibility studies for projects involving rainfed agriculture and prefeasibility studies for projects on stony land reclamation. OICD furnished consultants from USDA, universities, and the private sector for the Jordan Valley Agricultural Services Project, which is establishing a viable center capable of developing and disseminating appropriate agricultural technology for vegetable and fruit production in the region. Also, OICD is furnishing 13 specialists to conduct a prefeasibility study of projects involving range and water management and the development and management of desert areas.

Yemen--Agricultural Support  
AID University Contract May 1985 - April 1988

This project was originally handled in its entirety by the Consortium for International Development (CID). In 1984, however, USAID/Sanaa decided to decentralize the project, and parceled out various components to universities. OICD was requested by two of these institutions to provide technicians as resident advisors for the project. The first, an agricultural economist from the USDA Extension Service, arrived in May of 1985 and is working to promote agricultural data collection as well as human resource development. The second, a plant pathologist, is developing a national plan for plant protection and pest and disease control. Plans are currently under way to place an agricultural statistician on the project in mid-1986.

Israel-Egypt-United States--Trinational Research Project  
BNE-0192-P-AG-4221 October 1984 - Ongoing

The Technical Assistance Division continued to administer the negotiation and execution of this agreement. Under the agreement, OICD's International Research Division is coordinating collaborative research among the three countries.

October 1982 - Ongoing

The Resource Support Services Agreement (RSSA) provides three full-time agricultural specialists in agronomy, agricultural economics, and agricultural policy to assist the Near East Bureau in formulating, designing and preparing proposed projects. In addition, other specialists (in rural sociology, irrigation, extension, etc.) are being provided by OICD on a short-time basis under this agreement.

RSSA consultants have provided technical services in over a dozen countries including: Egypt, Yemen, Jordan, Syria, Oman, Morocco, Cyprus, Spain, Italy, and Tunisia. Projects developed included the Regional Rainfed Agricultural Project, Irrigated Farm Practices Project, and the Horticultural Marketing Study of Gulf States Project.





Saudi Arabia - Joint Commission  
(Technical Assistance is Provided by USDA on a Reimbursable Basis)  
June 1974 - Ongoing

The United States-Saudi Arabian Joint Commission is coordinated in the United States by the Department of the Treasury. Since the inception of the Joint Commission, more than \$1 billion has been provided by the Government of Saudi Arabia to fund project activities. OICD has collaborated with the U.S. Department of the Interior to manage the Agriculture and Water Project (AGWAT), which is one part of the overall mission of the Joint Commission.

In FY 1985, the AGWAT Project posted significant achievements, some of which were the culmination of many years' work:

- ° The Water Resources Group completed a water atlas of the Kingdom, compiling maps of the entire country which demarcate all usable water resources.
- ° The Lands Resources Team completed a draft of the soil atlas of the Kingdom. This volume contains maps and narrative describing virtually every arable acre of the Kingdom in terms of soil structure and taxonomy. It will be published in early 1986.
- ° The Computer Science Team continued its work at the Ministry of Agriculture and Water Computer Center, giving emphasis to development of Saudi Arabian technicians and analysts. By the end of the year, more than 75 percent of the center's staff was Saudi Arabian.
- ° Similarly, the Regional Agriculture and Water Research Center (RAWRC) moved toward Saudi Arabian management. Many of the section chiefs at RAWRC are Saudi Arabians, and the technical director of the center is a Saudi Arabian who recently returned to the Kingdom after earning a Ph.D. at Nebraska University.

In addition to human resource development and technology transfer, scientists at the center continued to make progress in agricultural research. New forage varieties from the United States and Africa were tested and showed excellent response to Saudi conditions; genetic trials on various table crops continued, seeking hybrids of exotic and local varieties that would combine the best traits of each; toxicological investigation of local plant species continued, and led to the isolation of a bactericidal agent; and, working with Saudi farmers, USDA scientists continued field trials of improved varieties of numerous commodities.

- ° Members of the Project Management Team are working closely with all involved parties to expand human resource development activities under the project.

WORLDWIDE: USDA TECHNICAL ASSISTANCE PERSONNEL, BY PROJECT, FISCAL 1985

<u>Project</u>	<u>No. of Technician Assignments</u>			<u>1/</u>
	<u>Long-Term</u>	<u>Short-Term</u>	<u>Total</u>	
A. <u>AGRICULTURAL PRODUCTION AND NUTRITION</u>				
Agricultural Production Technical Assistance	4	33	37	
Agricultural Research Support Services	1	-	1	
Corn Adoption Study	-	2	2	
Scientific Liaison Officers	-	11	11	
Food and Nutrition Technical Services	8	5	13	
Indo-U.S. Nitrogen Fixation Research	5	5	10	
Plant and Seed Materials	4	-	4	
Scientific Research: Prosopis	-	2	2	
Scientific Research: Science and Technology Support	-	1	1	
Scientific Research: Tsetse Fly Diet	-	2	2	
Symbiotic Nitrogen Fixation 2/				
Technology of Soil Moisture Management	3	10	13	
World Rhizobium Collection	5	2	7	
B. <u>NATURAL RESOURCES</u>				
Dominican Republic Forestry	-	1	1	
Forestry Support Program	8	28	36	
Land Use Planning (FAO)	-	1	1	
Scientific Research: Caribbean Pine	1	-	1	
Soil Management Support Services	5	22	27	
C. <u>AGRICULTURAL ECONOMICS AND STATISTICS</u>				
Data Recovery (FAO)	-	1	1	
Economic Analysis Support	4	4	8	
Microcomputers in Statistics (FAO)	-	1	1	
Nutrition Economics	6	7	13	
Production Indices	7	4	11	
Program and Policy Coordination	1	-	1	
Services to BIFAD	2	-	2	
Supply and Utilization Account Evaluation (FAO)	-	1	1	
Tunisia Remote Sensing	-	1	1	

See footnotes at end of table.

Continued

WORLDWIDE: USDA TECHNICAL ASSISTANCE PERSONNEL, BY PROJECT, FISCAL 1985--CONTINUED

	No. of Technician Assignments <sup>1/</sup>		
	<u>Long-Term</u>	<u>Short-Term</u>	<u>Total</u>
D. <u>MANAGEMENT AND RURAL DEVELOPMENT</u>			
Agr'l Planning and Support Services (Agribusiness)	1	-	1
Development Program Management Center	14	6	20
Development Management Evaluation	-	1	1
Dominican Rep. Project Design & Organizational Dev	-	2	2
Egypt Agricultural Management and Development	-	5	5
Haiti Technical Consultant Training	1	2	3
Malawi Project Development and Support	-	4	4
Mali Livestock	-	3	3
Pakistan Water Management Synthesis	-	1	1
E. <u>SPECIAL SERVICES</u>			
Information and Technical Inquiries	8	1	9
Information Management (FAO)	-	1	1
Interagency Liaison Services	<u>1</u>	<u>-</u>	<u>1</u>
TOTAL	89	170	259 <sup>3/</sup>

1/ Individual technicians may have performed more than one assignment.

2/ Consists primarily of research grants to State Experiment Stations.

3/ This includes 87 individual assignments to 38 countries by short-term technicians and one resident in-country technician. In addition, 52 U.S.-based technicians performed 92 TDY's to 52 countries.

The 57 countries involved were: Austria, Bangladesh, Barbados, Belgium, Belize, Bolivia, Brazil, Burma, Burundi, Chile, Costa Rica, the Dominican Republic, Ecuador, Egypt, United Kingdom, Finland, France, The Gambia, Guatemala, Haiti, Honduras, India, Indonesia, Italy, the Ivory Coast, Jamaica, Japan, Jordan, Kenya, Liberia, Malawi, Mali, Mexico, Morocco, Mozambique, New Zealand, Niger, Nigeria, Pakistan, Peru, the Philippines, Rwanda, Senegal, Somalia, Spain, Sudan, Syria, Taiwan, Thailand, Togo, Trinidad, Tunisia, Turkey, Venezuela, Western Samoa, Zaire, and Zambia.



SYNOPSIS OF WORLDWIDE TECHNICAL ASSISTANCE PROJECTS  
IN PROGRESS DURING FISCAL 1985

A. AGRICULTURAL PRODUCTION AND NUTRITION

Agricultural Production Technical Assistance

BST-4109-R-AG-1085

August 1981 - Ongoing

This Resources Support Services Agreement (RSSA) provides USDA specialists to help AID, Bureau for Science and Technology, Office of Agriculture (S&T/AGR), and overseas missions plan and implement projects that increase production and improve utilization of cereal grains, legumes, oilseed crops, and livestock.

The full-time RSSA staff during fiscal 1985 consisted of an animal nutritionist from the Extension Service (ES) and a plant pathologist from the Animal and Plant Health Inspection Service (APHIS). A plant physiologist from the Agricultural Research Service (ARS) served part-time during the year.

The RSSA sponsors the National Agricultural Library's (NAL) ongoing implementation of the Agricultural Information Exchange System (AGIES), which provides current research literature citations to AID specialists in Washington and overseas.

Other FY 1985 activities included:

- ° A small research project on alternatives to ethylene dibromide as a fumigant for tropical fruits and vegetables imported into the United States.
- ° Arrangements for a Presidential Agricultural Task Force to Ecuador.
- ° Other overseas and domestic short-term assignments totaling more than one person-year.

Agricultural Research Support Services

BST-0060-R-AG-2214

December 1974 - Ongoing

An OICD agricultural economist serves as chief staff officer for the International Agricultural Research Centers (IARC) in S&T/AGR. The IARC's include 12 centers sponsored by the Consultative Group on International Agricultural Research (CGIAR) plus the Asian Vegetable Research and Development Center and several other research programs. The economist is responsible for budget, administration, and policy work involved in AID support of individual centers and its participation in the CGIAR system. He also coordinates AID monitoring and review of the centers and their programs and fosters linkages between centers, AID regional bureaus, missions, USDA, and U.S. universities. He represents

AID at certain center board and program meetings and twice yearly meetings of the Technical Advisory Committee of the CGIAR.

Two projects associated with this RSSA are:

Corn Adoption Study  
BST-4111-R-AG-4070

July 1984 - February 1986

Two maize-breeding scientists carried out an historical study of the development and spread of improved maize germplasm in the LDC's.

Scientific Liaison Officers  
BST-4111-P-AG-4053

June 1984 - Ongoing

Eleven prominent U.S. scientists, three of whom are with ARS, act as liaison between the IARC's and the U.S. scientific community.

Food and Nutrition Technical Services  
BST-0831-R-AG-4207

January 1974 - Ongoing

OICD's Food Technology Branch assists the Office of Nutrition in AID's Bureau for Science and Technology (S&T/N), USAID missions, and private voluntary agencies (PVO's) in identifying, developing, and promoting the use of low-cost, nutritious, foods to improve the nutritional status of malnourished populations in less developed countries. Primary focus of the project is on:

- Nutritionally improved and fortified staple foods,
- Utilization of locally produced processed foods,
- Production of improved weaning food and food supplements for infants and young children and,
- Application of food science and technology to support the food industry in developing countries.

Among its 1985 activities, the project:

- Helped USAID and the Government of Egypt develop a plan for a national program for iron fortification of wheat flour as a major intervention to reduce iron deficiency anemia.
- Provided a technology to Indonesia for fortifying monosodium glutamate (MSG) with vitamin A and helped the Government of Indonesia and Helen Keller International carry out a project to evaluate the use of fortified MSG to alleviate vitamin A deficiency.
- Initiated a program in the Philippines for a field trial of extrusion stabilization of rice bran to evaluate the technical

and financial aspects of recovering edible rice bran oil as a byproduct of rice milling.

- Evaluated the capabilities of solar box cookers (SBC's) as a means of utilizing sunlight to cook food and prepare potable water in tropical countries.

Indo-U.S. Nitrogen Fixation Research

BST-1406-P-AG-4228

July 1984 - September 1985

This project supported the Indo-U.S. Science and Technology Initiative by partially funding the collaboration of USDA scientists with their Indian colleagues in nitrogen fixation studies. The Agricultural Research Service and the Forest Service are the USDA agencies involved.

Plant and Seed Materials

BST-0829-R-AG-2216

February 1974 - Ongoing

This RSSA, sponsored by S&T/AGR, partially funds a USDA Agricultural Research Service core staff at Beltsville, Maryland, to conduct research and distribute seed and plant materials to research centers in LDC's. At the request of USAID missions, technical assistance is provided to increase food production in these countries. Progress is achieved through agricultural research by use of experimental seed and plant materials and by broadening the germplasm base available to research plant breeders in LDC's.

In 1984, 3,901 plant or seed materials were sent in 116 shipments to 37 AID-assisted countries. Two full-time staff persons are assigned to ensure timely and complete service in processing requests.

Scientific Research: Prosopis

BST-0000-P-AG-3202

May 1984 - May 1987

The Agricultural Research Services, Western Regional Research Center, Berkeley California, is conducting research to develop prosopis, a leguminous tree species, as an agricultural crop. The project's objectives are to measure the food and feed values of the foliage, fruit, seeds, and other components of various prosopis species and relate them to ecological and social parameters in new and traditional uses. Prosopis is a potentially valuable multipurpose tree for semiarid land.

Scientific Research: Science and Technology Support

BST-5543-P-AG-3086

May 1983 - Ongoing

This PASA funds the participation of an ARS soil scientist in a collaborative research project on enhanced citrus production through exploitation of citrus dependence on vesicular-arbuscular mycorrhizae.



Collaboration is with the Fruit Experiment Station for the Caribbean in Barbados.

Scientific Research: Tsetse Fly Diet  
BST-5542-P-AG-2218

August 1982 - December 1985

Under this agreement funded by AID's Office of the Science Advisor, the U.S. Livestock Insects Laboratory (ARS) at College Station, Texas conducted research to develop a defined artificial diet for in vitro mass rearing of the tsetse fly. The artificial diet will eventually replace fresh or freeze-dried blood, which is impossible to maintain or even obtain in LDC's where the need for control measures is greatest. The diet will permit mass rearing of tsetse flies for use in suppression programs using sterile males of the species. One Zambian scientist is in training at the Insects Laboratory at College Station under the guidance of OICD's International Training Division.

Symbiotic Nitrogen Fixation  
BST-0610-P-AG-2170

April 1976 - Ongoing

S&T/AGR provides funding for the Cooperative State Research Service's (CSRS) subagreements with small and scattered groups of scientific experts on Rhizobia and biological nitrogen fixation. Grants are for conducting research on various factors limiting symbiotic nitrogen fixation and developing a method to overcome these factors in the effort to maximize world food production. In fiscal year 1985, a total of 68 grants were awarded to 46 scientists at 26 universities or research institutions.

Technology of Soil Moisture Management  
BST-4021-P-AG-1080

July 1981 - Ongoing

Soil and water management technicians and scientists, primarily from ARS, are working with S&T/AGR to support dryland (minimal rainfall) agriculture and irrigation projects in less developed countries. Project activities during 1985 were aimed at establishing research linkages between agricultural scientists in developing countries and the United States who are examining the problems of soil moisture management in dryland agriculture.

A tour of the Western Great Plains from North Dakota to Texas was conducted for 26 agricultural officials, research administrators, research scientists from Africa, the Near East and India. Agronomic practices of U.S. farmers were observed on soils and climatic conditions very similar to the Sahel region of Africa.

Discussions were begun for collaborative research projects involving host-country scientists, International Agricultural Research Center scientists, and U.S. scientists.

Recognizing the need by LDC's for a ready source of viable Rhizobia, S&T/AGR provides funding for a small team of ARS agrobacteriologists to staff the World Rhizobium Collection Center. The center provides a safe, perpetual depository for Rhizobium cultures. The source materials are available to researchers worldwide to upgrade plant production beneficial to less developed countries in their efforts to increase food production.

During 1984, RSSA staff distributed 614 cultures of Rhizobium in response to 102 requests from 24 countries. There were 11 requests from biotechnology companies. Forty Rhizobium strains were added to the collection during the year. ARS staff also provide collaborative support to the network of Microbiological Research Centers (MIRCEN) in Asia, Africa, and Latin America. There is particularly close association with MIRCEN's in Senegal and Kenya.

## B. NATURAL RESOURCES

### Dominican Republic--Forestry IDR-0000-P-AG-5078

February 1985

The USDA Forest Service provided the services of a technician to the Dominican Republic for technical assistance to the USAID Forestry Management Project. The technician developed an administrative manual, as well as plans for staffing, training, and the implementation of technical assistance for the project.

### Forestry Support Program (FSP) BST-5519-R-AG-2188

November 1980 - September 1988

FSP provides the Office of Forestry, Environment, and Natural Resources (S&T/FENR) with international forestry expertise to implement a worldwide forest resource management program. Seven full-time professional USDA Forest Service personnel conduct the Washington program, utilizing technically and socially relevant skills in forestry and related natural resources. In fiscal year 1985, RSSA staff and short-term experts furnished about nine person years of technical assistance to AID regional bureaus, missions and 19 LDC's. Short- and long-term consultants or USDA technicians are recruited by use of a computerized roster of over 2,000 forestry and natural resources experts from U.S. Government, university, and private sector sources. FSP's development and maintenance of this roster is a major contribution to the mobilization of technical assistance resources in forestry. FSP's forestry enterprise initiative is beginning to identify and develop markets for the forest products of AID-recipient countries while fostering environmentally sound forest resource management and conservation.

### Land Use Planning (FAO Rome)

October 1983 - Ongoing  
(Intermittent)

A land use planner from the USDA Forest Service assisted the Rome offices of FAO in developing guidelines for land use planning in LDC's. The technician compiled written contributions from all FAO Divisions and prepared a first draft of the guidelines. In addition, the technician provided assistance in finalizing the document and aided FAO in its 1985 Land Use Planning Meeting, contributing a total of 2 months assistance.

### Scientific Research: Caribbean Pine BST-5542-R-AG-2229

August 1982 - December 1986

Under this agreement funded by AID's Office of the Science Advisor, the Forest Service Institute of Tropical Forestry is conducting research on soil, topographical, and climatic variables that exert an influence on the growth and yield of the Caribbean pine (P. caribbea). This 3-year project has made considerable progress toward its goal of developing information for Costa Rica, Jamaica, Trinidad, and Venezuela, as well as Puerto Rico, so that forestry management guidelines can be prepared for commercial-level harvesting of Caribbean pine, the most widely planted tropical pine in the world. This project is also establishing more formal linkages between all forestry institutions involved in the study by providing training opportunities and conducting cooperative research.

### Soil Management Support Services (SMSS) BST-1229-P-AG-2178

August 1979 - Ongoing

Through this PASA with the AID/S&T/Office of Agriculture, the USDA Soil Conservation Service (SCS) cooperates with the University of Hawaii and OICD in providing technical assistance in soil survey and classification and in the use and management of soils in developing countries. The guiding principles of SMSS are centered in Soil Taxonomy, which outlines the U.S. system of classification and is the vehicle for agrotechnology transfer. In FY85 international training forums were held in Rwanda, Burundi, Zambia, and Tunisia under the sponsorship of SMSS and other donors. SMSS also contributed significantly to the funding and organization of international soil classification workshops in India and Brazil as well as a land-clearing workshop in Indonesia.

## C. AGRICULTURAL ECONOMICS AND STATISTICS

### Data Recovery (FAO Rome)

November 1984 - September 1985

The services of an agricultural economist from USDA's Economic Research Service were provided for 3 months to the Statistics Division of FAO in Rome. The technician's responsibilities were to recover and make consistent FAO's production data from old data files and to do further research necessary to enable FAO to publish an historical series on agriculture production.



An ERS agricultural economist was assigned to S&T/AGR through December 1984 to assist that office in:

- ° Country program evaluations,
- ° Field mission program evaluations,
- ° Field mission support in economic analysis, and
- ° The development of centrally funded research and technical services projects in agricultural economics.

In addition to short-term economic analysis services, the RSSA sponsored two studies by the International Research Division of ERS. The first was aimed at an identification and evaluation of financial constraints to development in countries experiencing food crises. The second examined patterns of intraregional agricultural trade in sub-Saharan African countries with the objective of identifying export opportunities for both African and U.S. commodities.

Microcomputers in Statistics (FAO Rome)

April - June 1985

A mathematical statistician from the USDA Forest Service helped FAO Headquarters in Rome develop methods for using microcomputers in processing food and agricultural statistics in developing countries.

Nutrition Economics  
BST-1191-R-AG-3125

July 1977 - Ongoing

The Nutrition Economics Group (NEG), a small staff of USDA agricultural economists, is assisting developing countries to integrate food consumption and nutrition concerns into their agricultural planning, programming, and policymaking through a program of applied research, technical assistance, training, and other outreach activities. NEG also provides continuous support to its sponsoring AID office, the Office of Nutrition, Bureau for Science and Technology.

Studies of the consumption effects of food and agricultural policies have been undertaken under the auspices of the NEG in 11 countries--Cameroon, Egypt, Honduras, Jamaica, Panama, Peru, Senegal, Sierra Leone, Sri Lanka, Sudan, and Tanzania. New studies were initiated during the year in the Dominican Republic, Indonesia, and Zambia. Additionally, support was provided to the Caribbean Food and Nutrition Institute to evaluate the consumption effects of pricing and marketing policies in two of the smaller islands in the Caribbean--Antigua and St. Vincent.

The RSSA staff also intensified its efforts during the year to help developing countries improve their data bases for consumption effects analyses. For example, NEG has been working to assist the Statistical Institute of Jamaica with the processing and analysis of two household income and expenditure surveys, one from the period 1975-77 and the second from 1984. During the year, analyses were completed on food expenditure and income distribution patterns in Jamaica during the 1975-77 period. A training course for Jamaican government personnel was also held during the year to show them how the data were processed and what type of analyses had been and could be done with the data. Arrangements were also made to assist with the design and analysis of data from a nationwide income and expenditure survey in Haiti and an urban consumption survey in Liberia.

A major effort was also initiated this year to improve the food consumption consequences of agricultural projects. The first step was to explain to project designers and implementers why they need to concern themselves with consumption issues and to indicate to them the factors (such as seasonality of production, crop mix and minor crops, income, the role of women in production, crop labor demands, and market prices and seasonality) that are likely to determine whether or not production increases actually lead to improved diets and nutrition. This was done in a paper prepared by NEG entitled, "Adding a Consumption Perspective to Farming Systems Research." Over 400 copies of this paper were distributed to AID staff and other agricultural researchers and project managers in developing countries. Next on the NEG agenda is to identify, test in the field in actual project situations, and evaluate alternative ways to integrate consumption and nutritional concerns into the design, implementation, and evaluation of agricultural research and other types agricultural development projects.

#### Production Indices

BST-0064-R-AG-3030  
 BST-0060-R-AG-5098  
 BFV-1904-R-AG-5079

January 1974 - September 1985  
 October 1984 - September 1985  
 July - September 1985

With these three RSSA's, AID's Bureau for Science and Technology, Bureau for Program and Policy Coordination, and Bureau for Food for Peace and Voluntary Assistance jointly fund ERS resources in the following areas:

- ° Providing indices of agricultural production in developing countries;
- ° Analyzing food availabilities and needs in AID-assisted countries; and
- ° Carrying out agricultural situation assessments in selected developing countries.

Program and Policy Coordination  
Agency for International Development

October 1984 - Ongoing

An agricultural economist from the Economic Research Service (ERS) has been working with AID's Bureau for Program and Policy Coordination (PPC) to carry out analyses of AID programs in agriculture and rural development and to design policy oriented research activities in these areas.

Services to BIFAD  
BBI-0000-P-AG-4011

September 1982 - September 1985

This PASA provides USDA staff support and special expertise to the Board for International Food and Agricultural Development (BIFAD). An ERS agricultural economist has been serving with the BIFAD staff to develop a strategy for training agriculturalists from developing countries. A program specialist from the International Training Division is assisting part-time with this work.

Supply and Utilization Account Evaluation (FAO Rome)  
January 1985

This project provided the services of an agricultural economist from USDA's Agricultural Stabilization and Conservation Service (ASCS) to FAO in Rome for a period of 2 weeks. The technician assisted FAO by evaluating its supply and utilization accounts for feedgrains and oilseeds. In addition, the technician explored methods for the transfer of ASCS statistics to FAO/Rome via floppy disks.

Tunisia Remote Sensing  
ITN-0328-P-AG-4240

November 1984

An SRS mathematical statistician spent 2 weeks installing upgraded computer equipment and a new version of a survey data processing system. Ministry of Agriculture personnel were trained in using this new version as well as in other software packages.

D. MANAGEMENT AND RURAL DEVELOPMENT

Agricultural Planning and Support Services (Agribusiness)  
BST-1096-P-AG-2194 August 1978 - Ongoing

OICD and the Organization of American States (OAS) are cooperating to provide a rural finance specialist to work with the Bureau for Science and Technology, Office of Rural and Institutional Development (ST/RD), in implementing a Rural Savings and Capital Mobilization project in LDC's. During FY 1985, project activities were carried out in West Africa and Central America.



Development Program Management Center (DPMC)

BST-5317-X-AG-4268

March 1976 - Ongoing

The Performance Management Project supports DPMC's applied research and dissemination activities focused on development project and program management. DPMC's provision of technical assistance and training supports its applied research and dissemination work. DPMC:

- Has published a paper on "Building a Country Capability in Design and Appraisal of Projects and Programs in Developing Countries."
- Is completing papers providing literature overviews and frameworks for program development and implementation approaches.
- Has collaborated with the National Association of Schools of Public Affairs and Administration (NASPAA) on research papers on managing training strategies and managing organizational change.
- Is testing a system for collecting data during technical assistance efforts to culminate in country assistance reports that provide guidance to managers.
- Has completed a case study on the microcomputer as a tool in management with a special focus on human and organizational effects.

During fiscal year 1985, OICD's Development Program Management Center (DPMC) had major responsibility for leadership and technical input in the seven projects summarized below:

Development Management Evaluation

BST-5317-X-AG-4268

August 1984 - September 1985

The Center for Development Information and Evaluation in AID's Bureau for Program and Policy Coordination has undertaken a series of impact evaluations to provide a better understanding of project management problems and to assess the impact of some management capacities in host countries. DPMC has contributed to the first phase of these evaluations conducted in the Africa Region by (1) preparing a framework and approach for evaluating financial management, (2) assisting with preparation of field evaluation teams, (3) facilitating an evaluation synthesis workshop to compare the results of six evaluations in Africa, and (4) developing a conceptual framework for analysis and synthesis to relate lessons of managing development projects to institution building in host countries.

Dominican Republic--Project Design and Organizational Development

BST-5317-X-AG-4268

August - September 1985

DPMC provided a consultant team to assist with planning a newly created national agricultural research institute. The team worked with AID and Dominican officials to organize a

collaborative 8-month effort to develop options analyses for the new institute and to design a 10-year, \$14 million AID project to support agricultural research and technology transfer.

Egypt--Agricultural Management Development

BST-5317-X-AG-4268

August - September 1985

In collaboration with the International Development Management Center, University of Maryland, assistance was provided by DPMC to the Center for Agricultural Management Development, Ministry of Agriculture, Egypt, in the development of its management needs assessment, training and consulting programs, with specific focus on the development of agricultural research management training.

Haiti--Technical Consultant Training

BST-5317-X-AG-4268

October 1983 - September 1986

Resident and short-term technical assistance was provided to the Direction of Evaluation and Control (DEC) of the Ministry of Planning to improve the project-monitoring and evaluation systems for donor-sponsored projects using DPMC's action-training approach and intervention methodologies.

Malawi--Project Development and Support

BST-5317-X-AG-4268

April 1984 - October 1985

DPMC is working with USAID Malawi and the Malawian government to create a project management system that permits USAID Malawi to expand its project portfolio without a corresponding expansion of USAID staff. Based upon agreements between USAID, the Ministry of Finance, other ministries such as Agriculture and Commerce and Transport, and private sector organizations, DPMC has provided pre-implementation planning and project start-up assistance to the Malawi Agriculture Research and Extension Project, the Rural Enterprises and Agricultural Development Institutions Project, and the Malawi Commercial Transport Project. Further implementation support is being planned for the Malawi Agriculture Research and Extension Project. DPMC anticipates further funding until June 1986.

Mali--Livestock Sector

IML-0218-P-AG-3066

August 1983 - September 1987

This 5-year, \$17 million livestock project is the first of its kind in Mali to have a management component as part of the design. DPMC will provide consultation as part of this management component. Two technical assistance temporary duty assignments during FY 1984 and 1985 started the process of collaboration among project personnel to develop workplans and budgets as part of management improvement. The participants in the activities have expressed great satisfaction with the management improvements resulting from DPMC consultations. The management component innovation in Mali represents a pilot effort that may be duplicated in other projects.

In collaboration with the International Development Management Center, University of Maryland, assistance was provided by DPMC to S&T's Water Management Synthesis II Project in the development of an approach for assisting in the project implementation planning of the Command Water Management Component of Pakistan's Irrigation Systems Management Project.

In addition to the above, DPMC carried out the following related activities:

Thailand--Northeast Rainfed Area Development Project

DPMC provided 6 weeks of technical assistance to refine and modify the management information systems of this project under contract to and in cooperation with the University of Kentucky which provides the U.S. technical assistance to this project. The assistance focused upon project management for long-term program development and improvement of services delivery and proposed strategic management as a means for focusing the information systems for improved overall management.

International Conference on Rapid Rural Appraisal

DPMC provided assistance to the Ford Foundation and Khon Kaen University of Thailand for the jointly sponsored International Conference on Rapid Rural Appraisal. DPMC assisted with the planning and facilitation of the conference and contributed to the development and refinement of technical and analytical frameworks during the conference at Khon Kaen University in September 1985.

American Society for Public Administration

DPMC joined with representatives of the University of Maryland's International Development Management Center to lead a session on Performance Management and Management Development at the annual conference of the American Society for Public Administration. The session with the Society for International and Comparative Administration focused upon a theoretical framework. It used three case studies to examine the tentative propositions and lessons to be drawn from these experiences relative to the theoretical foundations of development administration and institution building.

Team Planning Meeting

The Team Planning Meeting methodology is being widely disseminated with increased interest and use in AID, USDA, universities and private firms. The methodology has been adapted



to multiple uses, including evaluation, project pre-implementation planning, implementation start-up, project problem solving and replanning, and technical assistance team preparation. This methodology, which was formulated by DPMC in 1980 and has been refined by USDA since 1982, is proving to be a very valuable means for improving organizational, team, and individual performance related to international development projects.

#### World Bank Publication

The World Bank, in conjunction with the Development Program Management Center, modified the USDA publication "The Action-Training Approach to Project Improvement: Guidelines for the Trainer." The modified version was used as a basis for a seminar for World Bank staff and the World Bank will issue the publication in its technical paper series in early 1986 for worldwide distribution.

### E. SPECIAL SERVICES

#### Information and Technical Inquiries

BPC-0064-R-AG-3076

March 1974 - Ongoing

Under the RSSA sponsored by the Development Information Unit of AID's Bureau of Program and Policy Coordination, OICD's Technical Inquiries Group provides technical agricultural information on demand to professional agronomists, horticulturists, agricultural economists, and livestock production experts on overseas assignment with AID in developing countries. The staff receives inquiries for current and retrospective research and extension literature in all areas of the agricultural sciences and performs systematic, comprehensive, exhaustive searches for literature derived from USDA and worldwide sources. Information resources of the Department, National Agricultural Library, Land-Grant universities, other government agencies, and agricultural institutions throughout the world are utilized, in addition to bibliographic data base files. Experts in the subject fields are called on for technical input and information.

#### Information Management (FAO Rome)

January - February 1985

A writer-editor from the USDA Economics Management Staff helped the FAO's Statistical Division in Rome edit a prototype of a chartbook on Middle Eastern agriculture. The technician was also responsible for providing guidelines for producing future chartbooks, and for training FAO staff in certain phases of production.

July 1982 - November 1984

This AID-USDA Agreement, sponsored by the Office of Contract Management in AID's Directorate for Program and Management Services, provided USDA assistance in implementing technical assistance programs funded by AID and carried out under the Participating Agency Program. During part of fiscal year 1985, an ERS contract specialist was responsible for:

- Handling day-to-day relations with assigned participating agencies,
- Negotiating agreements for services, and
- Administering each service provided under PASA/RSSA agreements with participating agencies on behalf of AID's substantive and geographic bureaus and missions.

The technician was also responsible for the negotiation and administration of contract and grant actions as required.













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